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ABSTRACT

The Florida Board of Community Colleges conducted a survey of the current state of preparatory programs (i.e., math, reading, English, and English as a Second Language (ESL)) in the state's 28 community colleges. Data was gathered through a literature search, a survey of directors of developmental programs, Bureau of Research and Information Systems records, and site visits at seven colleges. The data indicated that 103,679 students were enrolled in preparatory courses in 1992-93, representing a diverse group consisting of 60% female, 57% part-time, 54% White, 30% Black, and 13% Hispanic. Based on study findings, the following recommendations were made for institutional and statewide policy: (1) acknowledge preparatory instruction as part of state community college mission; (2) set the entry placement test so that students are placed in credit or preparatory courses as appropriate; (3) maintain uniform procedures for tracking preparatory student outcomes; (4) review vocational preparatory programs further; (5) explore alternative instructional strategies to decrease the time for improving student skills; (6) increase funding and recommend that colleges seek federal, state, and other sources to develop more comprehensive and intensive counseling and teaching approaches; (7) continue efforts to secure funding and extend faculty development programs for computers; (8) conduct a statewide review of ESL programs; (9) increase funds for support services to 0.4% of direct instructional costs; (10) strengthen articulation efforts between colleges and schools; and (11) endorse the recommendations of a high school preparation Task Force for increasing high school graduates' performance levels. The survey instrument and data tables are appended. Contains 12 references. (KP)

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FLORIDA STATE BOARD OF

COMMUNITY COLLEGES

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COLLEGE AND VOCATIONAL PREPARATORY INSTRUCTION

JC 940 356

Program Review Report
June 1993

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SUMMATIVE REVIEW

OF

COLLEGE AND VOCATIONAL PREPARATORY INSTRUCTION

Sylvia Saari Fleishman, Ph.D.
Educational Policy Director

JUNE 1994

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PREFACE

According to Florida statues and rules (Sections 240.7 (5) and 240.312, and Rule 6A-10.039, FAC) the State Board of Community Colleges (SBCC) is required to review instructional programs every five years. The preparatory programs report which follows fulfills the statutory requirement and responds to a recommendation made by the Postsecondary Education Planning Commission (PEPC) that the State Board of Community Colleges conduct a statewide examination of preparatory programs in the community colleges (An Assessment of College and Vocational Preparatory Programs, 1990). The report is summative in nature covering both college and vocational preparatory courses.

The purpose of the report is to reflect on the current state of affairs in preparatory programs throughout Florida's twenty-eight community colleges and to make recommendations for institutional and state-level policies concerning the findings.

For purposes of this report, preparatory programs shall refer to college preparatory and vocational preparatory math, reading, English, and English as a Second Language (ESL) courses that are offered in community colleges to students whose skills in those areas have been determined to be below college-level.

Data for the report was gathered in the following ways: (1) by searching current literature on preparatory students; (2) by analyzing responses to a survey sent to the directors of developmental programs at twenty-eight community colleges; (3) by utilizing data provided by the Bureau of Research and Information Systems within the Division of Community Colleges; and (4) by conducting interviews at the following community college sites: Brevard Community College in Cocoa, Edison Community College in Ft. Myers, Florida Community College in Jacksonville, Indian River Community College in Fort Pierce, Miami-Dade Community College in Miami, Santa Fe Community College in Gainesville, and Tallahassee Community College in Tallahassee. These college sites were selected because they represented various geographical locations and campus sizes throughout the state.

Statutes and rules pertaining to preparatory programs are included in the appendix on p. 77.

A report of this nature could not be produced without the valuable assistance of many active and dedicated professionals. Special recognition is given to the advisory committee which was composed of deans or vice-presidents of instruction, college preparatory directors and faculty, staff representatives from agencies of the DOE, and representatives from the legislative staff. These representatives provided direction with regard to issues addressed in the report, and questions included on the survey, and they responded to drafts of the report before the final version was completed. Their

expertise is greatly appreciated. A list of the names and addresses of the advisory committee can be found in the appendix on p. 91. Special thanks is also given to the Division of Community College's Bureau of Research and Information Systems for supplying the demographic and success rate data for this student population, to the Bureau of Finance for the cost data, and to all those who contributed in less formal but, nonetheless, very valuable ways.

RECOMMENDATIONS

1. Recommend that college and vocational preparatory instruction be acknowledged in statute as part of the Florida Community College mission and institutionalized to provide continuity of funding, planning, and instructional implementation.

2. Recommend that the State set levels for college and vocational preparatory placement on the new common entry placement test at levels that will appropriately reflect whether students are best placed in credit courses or college/vocational preparatory courses.

3. Recommend that uniform procedures as defined in State accountability measures for tracking of college/vocational preparatory student outcomes be maintained by all institutions.

4. Recommend that further review of vocational preparatory structures and procedures be initiated to assist in examining productivity of programs.

5. Recommend that community colleges explore creative and/or alternative approaches to college/vocational preparatory instructional strategies and course structures to promote, to the extent possible, the most time-efficient method for improving student skills.

6. Recommend that increased funding be allocated for the establishment of more comprehensive and intensive counseling and teaching approaches for all community college/vocational preparatory students.

7. Recommend that each community college seek additional resources from federal, state, and/or private sources to assist in the development of intensive counseling and teaching approaches for preparatory students.

8. Recommend that efforts continue to secure funding for necessary computer hardware and software both for instructional purposes and for appropriate record keeping.

9. Recommend that community colleges extend faculty development programs in computer technology to insure that preparatory faculty and faculty in general are competent and confident in computer usage.

10. Recommend that a separate statewide program review of English as a Second Language programs be conducted as soon as is feasible.

11. Recommend that the legislature endorse the concept of increased support services as cited in recommendations 6 and 7 by raising the support factor from 3/10 percent to 4/10 percent of direct instructional cost.

12. Recommend that articulation efforts between community colleges and secondary schools be strengthened by effective use of current feedback reports; by including administrators, counselors, faculty and parents in the process; and by emphasizing the necessary competencies students will need to be successful in college.

13. Recommend that the State Board of Education strongly endorse the recommendations of the Task Force on High School Preparation for Postsecondary Education and Employment which call for elevated performance levels by high school graduates.

INTRODUCTION

While students have been entering college underprepared since the early days at Harvard in 1636, the fact of the matter is that students in the 1990's are entering colleges much less prepared than they were in the 1960's and 1970's. National estimates from the Department of Education for the year 1989-1990, the most recent data currently available, indicated that 30 percent of all entering college freshman took at least one remedial course (Lively, 1993). As a result, lively debate has been generated among educators and legislators about the need for higher standards as students exit high school and enter college. Legislators object to paying twice for skills that students should have received in high school, and some college faculty resent having to teach basic skills to college students.

Remedial or developmental programs, as they are more commonly named, began in the mid-1800's when the first program was established at the University of Wisconsin in 1849. Though they have been in existence for more than a century, they became more prominent in the 1960's due to desegregation, affirmative action, and the emergence of non-traditional students on the college campuses.

In Florida the 1983 legislature enacted the following statute:

> Community college or state university students who have been identified as requiring remediation pursuant to subsection (1) shall enroll in remedial courses to develop needed skills. These students shall be permitted to take courses concurrently in other curriculum areas for which they are qualified, while enrolled in remedial courses. Credit awarded for remedial courses shall not be counted towards fulfilling the number of credits required for a degree (S. 24, Chapter 83-325, Laws of Florida).

In response to this statute, the Postsecondary Education Planning Commission (PEPC) recommended in The Master Plan for Florida Postsecondary Education (1984) that separate and distinct college preparatory programs be developed which "would differ from the traditional high school course content approach" (p. 29) and called for the establishment of statewide standards to judge the student's progress and levels of competency.

Many of the early developmental programs were conducted in learning laboratories where students were pre-tested and then put through intense one-on-one self-paced instructional material. Tutors were available to provide individual assistance. When the student completed the prescribed material, he/she post-tested to prove that the competencies had been mastered, a procedure that is still followed for most vocational preparatory programs. No one envisioned that this phenomenon would proliferate and become a lasting component of college educational settings. But indeed it has. Instead of the numbers of underprepared students decreasing, they have been steadily increasing. In addition to the learning lab concept, separate classes for non-

transferrable credit were created. Currently, virtually all colleges and universities have had to establish remedial programs of some type.

Community colleges in the state of Florida carry the heaviest responsibility for remedial efforts. Approximately 50 percent of the students matriculating at these colleges require remediation in at least one of the three basic skills areas of mathematics, reading, and English. The prevailing philosophy among community college professionals has been that the community college is the most appropriate place for this remediation to occur. "If not us, then who?" they ask. They are convinced that students will not return to a system that has failed them. In addition, they are quick to point out that the average age at most community colleges is approximately 28. Because of the growing numbers of adult students entering or returning to the college classroom, they maintain there will always be a need for some remediation and that adults will certainly not want to return to a high school setting for purposes of review.

Concern from the state level revolves around the following issues: What can be done to assure that content and levels of high school courses are appropriate facilitators of college entry requirements? Should community colleges elevate their placement criteria? What concrete steps can be taken to stem the growing tide of students having to spend extra years on college campuses taking courses that do not count toward their degree or career goals? Who should do the remediating and at what cost to the state?

These then are the general concerns with which this report will deal. It will also depict, to the extent possible, the status of preparatory programs in the state, make recommendations for policy and practice, and share insights from exemplary programs within the state.

Before the analysis of state programs is presented, a review of pertinent literature is provided.

Literature Review

According to a national study (U.S. Department of Education, May 1991), 91 percent of all public colleges offered at least one remedial course. The study, conducted in 1989, found that 30 percent of all college freshmen enrolled for at least one remedial course. Other significant findings from the study indicated that approximately 20 percent of colleges offering remedial instruction had a separate remedial department or division and another 20 percent awarded degree credit for remedial courses. One-tenth of the institutions awarded no credit for such courses. Data regarding success rates indicated that 77 percent of the students passed remedial reading, 73 percent passed remedial writing, and 67 percent passed remedial mathematics. Close to half of the institutions participating in the study were unable to provide reliable information about retention rates of these students once they left the remedial program. About 90 percent relied on placement tests to select students for remedial courses. One third of the institutions allowed students to

enroll in college-level courses in conjunction with remedial courses while only 2 percent allowed no enrollment in regular academic courses until remediation was completed. Overall, the study indicated that the number of institutions offering remedial courses in mathematics, reading, and writing had decreased from 82 percent in 1983-84 to 74 percent in 1989-90.

In a similar study, The Southern Regional Educational Board (SREB) (1992) found that in their region 75 different tests were used in 125 different combinations to place students in either degree credit or remedial courses. Reforms during the 1980's have eliminated the controversy of awarding degree credit for remedial courses. According to SREB, only 2 percent of public institutions still award degree credit. Much more widely practiced is the awarding of institutional credit. About three-fifths allow simultaneous enrollment in remedial and regular college courses. As was found in the national study, less than half of the SREB institutions were able to give retention rates for remedial and non-remedial students. Only about a third of the respondents reported that ongoing training is available for remedial instructors. Enrollments for blacks and Hispanics in the SREB region were found to be one and one half to two times those of white students, although more white than black students take remedial courses. Approximately 4 out of 10 entering freshman need remedial assistance in mathematics. In contrast with the U.S. Department of Education study, SREB reports that enrollments in remedial courses have increased slightly over what they were in 1984 with

the largest increase reflected in the two-year colleges. The increase in Florida's community colleges can be explained, at least in part, by the 1983-84 policy decision to remove college preparatory programs from the State University System with the exception of FAMU.

Boylan (1993) has compiled one of the most recent comprehensive national studies of remedial/developmental students. The study included 150 institutions of all types (4-year public, 4-year private, research universities, 2-year community colleges, 2-year technical colleges) and results were based on the random selection of 5,166 students. Of these students 62.5 percent were white, 26.6 percent were African-American, 6.6 percent were Hispanic, 2.6 percent were Asian, and 1.6 percent were American or Alaskan Indian. Highlighted below are some key findings from his study.

> --Developmental students' retention rates do not differ significantly from national averages at different types of institutions.
>
> --Seventy-one percent of the developmental students who withdrew did so in good standing.
>
> --Student success in developmental courses contributed significantly to success in the first related college level course and to retention.
>
> --The average age of developmental students is 21 years with a range between 16-65 years of age.
>
> --The majority of developmental students at 2-year and 4-year colleges are degree-seeking students.

With regard to persistence through graduation, the study found that 4-year research universities had the highest rate of persistence while 2-year

community colleges had the lowest rate. This should not be surprising since research universities are highly selective and are likely to have fewer students needing remediation while community colleges have historically been the open door colleges offering education to all who can benefit. GPAs of developmental students, generally speaking, were lower than the average GPAs at most institutions. However, graduation rates were higher than might be expected, especially at the community college. The basic message of Boylan's study is that developmental programs do seem to work. They have a positive impact on retention and success in later courses. Consequently, his evidence suggests "that developmental programs are successful in accomplishing the objective of improving student academic performance."

At the state level issues of policy regarding remedial education have surfaced from time to time. In March, 1993, the Commissioner of Education advocated that community colleges be more selective in their admission procedures and further recommended that community colleges in the state of Florida consider minimum course requirements for entry to college. The latter suggestion is in keeping with a study conducted in North Carolina (Pratt, 1993) which found that students who completed minimum requirement courses in high school were much more likely to be successful in college. Arguments for increasing high school standards certainly gain increasing credibility when the Department of Education officials were quoted in the Tallahassee Democrat (June 8, 1993) as saying "It's embarrassing...we are graduating twelfth graders

[but] we can only guarantee eighth grade skills." Given the present status of high school graduates in Florida, then, it is not surprising that students enter the community college with academic deficiencies.

Overview

The community colleges of Florida have traditionally supported and will continue to support the open door mission. This means that they provide educational opportunity to any student who may benefit. As a consequence, many students find themselves in college or vocational preparatory courses at entrance. These programs have been authorized by law (F.S. 240.117) and have been designed to assure that students who do not qualify for placement into college-level courses have an opportunity to bring their academic skills to the appropriate level. While the colleges have accepted students who are performing below college level, they have also been equally diligent in establishing standards in college and vocational preparatory courses and other support activities that will assure student readiness for college work. They also have established standards which students must meet to assure successful completion of State University System upper division courses. The reality is if 50 percent of the incoming students need college/vocational preparatory work, and if they take it and persist, they will do well. This is a major strength and contribution that the community colleges make for both educational opportunity and educational standards.

Characteristics of Preparatory Students

The composite picture of the preparatory student is increasingly diverse. It includes non-traditional students who have returned to the classroom after many years. These students may be any age from their mid twenties to past sixty years of age. As returning adults they often have many barriers to overcome such as combining work and school, child care concerns, and a lack of confidence. While confidence with adult students is often low, motivation is usually high. On the other hand, for traditional students entering directly from high school, motivation is often low while confidence, though sometimes misplaced, is high. Many of these traditional students are high school drop-outs who haven't had a history of academic success. They often lack internal controls and are not strongly goal-oriented. Then there are increasing numbers of academically disadvantaged students--those who are learning and/or emotionally disabled, those whose backgrounds haven't provided a respect for learning and what it can mean in one's life. Another group of students appearing in ever-growing numbers is non-native speakers of English who exhibit many different levels of language proficiency. These students provide a constant challenge to instructors who themselves may not feel able to meet these students' needs. Compounding the difficulty is the fact that all of these varying types of students also have different learning styles which faculty members must try to determine and then appropriately design learning materials to fit the student's need. Much of the student's readiness, even for

remedial work, is determined by what courses the student took while in high school. Those who have taken college preparatory courses have less deficiency, for the most part, than high school students who took general courses. These descriptors show just how complex a group these students are to serve appropriately. The next section provides an analysis of numbers enrolled as well as age, race, and gender factors pertaining to this population.

Demographics

According to data provided by the Division's Bureau of Research and Information Systems, the total number of students enrolled in preparatory courses for 1992-1993 was 103,679. Of that number approximately 60 percent were females and 40 percent were males. The most frequently occurring age range was 21-25, with the spread of ages ranging from 16-65+. The preceding year 1991-1992 revealed a total count of 99,601 enrolled in preparatory courses which amounts to an increase in enrollment of 3.9 percent over a one-year period. For both academic years 57 percent of this student group were part-time students with the remainder being either full-time students or summer enrollees who were not categorized as part-time or full-time.

Race distributions for college preparatory and vocational preparatory students are provided in Table 1 (p. 17) as system totals. More detailed information broken out by institution can be found in the appendix on p. 95.

TABLE 1.

	College Preparatory		Vocational Preparatory	
	No.	Percent	No.	Percent
Asian	2,704	2.65	39	2.17
Black	19,309	18.95	535	29.81
Hispanic	18,585	18.24	239	13.31
Indian	561	0.55	7	0.39
White	60,632	59.51	971	54.09

This data reinforces Boylan's (1993) study in that more whites are enrolled in preparatory courses but Blacks and Hispanics are enrolled in greater numbers than they are reflected in society. It appears that Blacks are also disproportionately represented in vocational preparatory. The data also reveals that college preparatory students greatly outnumber the vocational preparatory students in Florida.

Mission

According to Florida law, (F.S. 223.051) programs of remediation "shall provide students with enhancement or improvement of any basic skills in which the students are deficient and shall assist students in moving from one grade level to another and assist residents of the district who request remedial assistance, including those residents with high school diplomas." The statute further stipulates that district school boards will work with community colleges to assure that community college students have access to remediation and that annual reports of student progress be provided to the Legislature.

While the law supplies a legal definition of mission for college/ vocational preparatory programs, the working mission statements at the institutional level can be stated either succinctly or more comprehensively to capture many of the complexities of working with this diverse group of students. The two quotations below have been selected to demonstrate both versions of the mission as viewed by the respondents to the survey.

> --Our purpose is to prepare students to be successful in their academic pursuits. It is to provide the remediation needed to bring the student to a skill level in English, reading and mathematics essential to the completion of college level work.

> --The college recognizes the diversity of student needs and supports the philosophical imperative for College Preparatory studies by recognizing the different academic and cultural backgrounds of the student; including in the desired outcomes of learning in the affective as well as the cognitive domain; providing realistic access to college credit courses in an environment of trust and faith in the student as an individual; offering college preparatory studies that are integrated into the college credit program as a continuous program of study; establishing comprehensive support services with the flexibility to meet a wide range of student needs; assuring a student access to higher education while maintaining a quality program; requiring the total commitment of faculty, staff, and administrators to insure student success; and recognizing that some students will not be successful in College Preparatory Studies and will be assisted with finding other suitable educational alternatives.

The essentials of the mission, then, require the upgrading of pre-college skills to the point where student participants can demonstrate the ability to handle college-level work in mathematics, reading, and English. But the broader definition acknowledges that these students may require much more than regularly administered doses of academic remediation. Many of these students

require additional guidance and counseling, additional assistance in learning how to learn, and additional structure and reinforcement in order to be successful as students and to be more successful with their lives.

The need for developmental programs in community colleges will remain for several reasons. First, there has been a conscious policy decision in the state that the Community College System, rather than the State University System, is the appropriate agency for addressing pre-college work. Second, inherent in the commitment to the open door policy is awareness that students lacking necessary skills will be provided a second chance to succeed. Third, the changing nature of the student population, its diversity, and the increasing average age of students, all suggest that the need for these special programs will continue. Yet often colleges must struggle to hire the needed personnel for these programs, to find the necessary space for laboratories and equipment, and to advocate for their legitimacy in spite of the success of their programs. For these reasons the following recommendation is made:

> **1. Recommend that college and vocational preparatory instruction be acknowledged in statute as part of the Florida Community College mission and institutionalized to provide continuity of funding, planning, and instructional implementation.**

Identification and Placement Procedures

How are these students determined to need preparatory programs? Most institutions rely first and foremost on the results of placement tests administered when the student first enters college. The state has established

minimum cut scores in Rule 6A-10.0315, FAC. The rule states that students who score below the recommended minimums on any of eight currently approved tests "shall enroll in college preparatory communication and computation instruction..." The rule further states:

> (3) Nothing provided in Rule 6A.10.0315(1), FAC, shall be construed to prevent the enrollment of a student in college preparatory instruction if the community college or university determines that such enrollment would enhance the student's opportunity for future academic success. The determination of enrollment would be made after counseling with the student and the analysis and consideration of other assessment techniques and measurements, which may include transcripts, grade evaluations, diagnostic, placement or psychological instrument, or other proven indicators or predictors of academic performance.

While the state has established minimum scores to which many of the community colleges adhere, the survey indicated that 15 of the 28 (53.6%) have incorporated the rule above to require higher scores under certain circumstances to increase the likelihood that students will succeed when they enter college-level courses. This is a critical factor to keep in mind when larger numbers of students are testing into college preparatory courses. The increase at some institutions may be due, at least in part, to the fact that they are requiring a higher standard.

While placement test scores are most frequently cited as the method used for placement of students into preparatory courses, it is not the only method used. Other methods used include being counseled to enroll by faculty or counselors or by the student self-selecting preparatory courses. The latter action is often taken by older students returning to college after many years

away from a classroom setting. The refresher courses in the pre-college areas often provide them with both the review and the confidence-building they need before attempting college credit courses. In addition, faculty indicate that placement tests combined with high school GPA are often the best indicator of a student's college potential.

Single College Entry-Level Placement Test

The State contracted with the College Board for the development of a new single college entry-level placement test which will eventually replace the eight tests now in use. That exam is in the process of being developed and the projected date for availability is July of 1995. A computerized version has already been developed. It is hoped that the new test will provide greater consistency across the state with regard to placement procedures, and it is likely to have an impact on the preparatory student population depending on what new cut scores are established for the test. Since several colleges have expressed a need for higher cut-off scores on current exams and due to the numbers of students who have either performed poorly at college level or who have had to be counseled to enroll in college or vocational preparatory courses, the following recommendation is made.

> **2. Recommend that the State set levels for college and vocational preparatory placement on the new common entry placement test at levels that will appropriately reflect whether students are best placed in credit courses or college/vocational preparatory courses.**

Curriculum

Traditionally, the curriculum for preparatory programs has consisted of the basic skills areas which include mathematics, reading, and English/writing. Some institutions have also begun to address the science courses, especially as they relate to nursing. But those efforts remain rather limited. With regard to the basic three, however, most institutions offer at least two separate preparatory courses in English and mathematics. However, in reading, 50 percent of the colleges offer one course with the remaining 50 percent offering two or more. Sixteen out of the 28 community colleges offer English as a Second Language (ESL) courses. The average number of ESL courses offered was 2 out of a range of 1 to 8 courses. Twenty (20) of the colleges indicated that the number of preparatory courses offered was sufficient to meet student need while 8 felt that the number offered was insufficient. Those who expressed dissatisfaction gave reasons such as those that follow:

> Additional levels are needed in reading and writing to serve students of varying ability levels, maturity levels, learning rates, etc. Courses should be open-entry/open-exit, competency-based. Courses offered should include personal development, addressing motivation, self-image, career planning, learning styles, etc.

> Although the number of levels are adequate, the curriculum within the levels needs to be more balanced. The second level prep courses are more heavily loaded with content. We are adjusting course content within the levels to come to a better balance between what is taught at first level and what is taught at second level. We have already made some adjustments in mathematics this semester and are examining the English to effect the same kind of change next semester.

> Demand for ESL training will increase in the future. There will be a need to develop curriculum, staff, and support course offerings.
>
> In an open access college, there is no "floor" for the lowest level college prep courses. It is not realistic to expect a student to gain 4 or 5 years of reading level proficiency in 1 or 2 semesters.
>
> There may be a need for more levels in the traditional [college] preparatory such that the exit levels are at a higher level such as 12th grade rather than the levels at which one is required to test into prep.

Organizational Structure

According to research findings (Boylan, 1993), a centralized preparatory program is more conducive to student success. A centralized organizational structure is defined here as an autonomous preparatory/ developmental department with a separate budget and staff including a director/coordinator who oversees the program. Conversely, a decentralized program is one that is combined with English and mathematics divisions/ departments and is directed by the chairs of those divisions/departments respectively. Survey results indicate that currently 20 of Florida's community college preparatory programs operate under a decentralized structure while only 5 are centralized. The remaining 3 fell into some sort of combination of the two. That is, they may have had a centralized program for English and writing but a decentralized format for mathematics.

Both of these organizational structures have advantages and disadvantages. Advantages to the centralized approach are as follows:

1. A single expert directs and coordinates the program and is a strong advocate for the preparatory student/program.
2. A centralized focus provides more uniformity and consistency in curriculum.
3. Coordination between learning assistance services and preparatory courses tends to be stronger.
4. Full-time and part-time faculty are able to focus fully on college preparatory issues.

Disadvantages include:

1. An academic stigma may be attached to remedial/developmental departments.
2. Instructors, many of whom are adjunct, may not have necessary skills to teach preparatory students.
3. The high cost of remediation has a "chilling effect" on the program.
4. A centralized program can make sequencing of courses more difficult due to less interaction between preparatory and college faculty members.
5. Unless strong efforts are made, there is no link with the [college] disciplines.

The decentralized system, which combines preparatory math and English/writing under the college English and mathematics departments claims the following advantages:

1. Preparatory faculty and college faculty communicate more because they are in the same division.
2. Faculty ownership of the program is stronger because they teach both preparatory and college-level classes.
3. There is no "second class" faculty.
4. There is a more articulated, seamless flow from preparatory to college level.
5. Students enter college-level more reassured having been taught by regular college-level instructors at the preparatory level.
6. It is more cost effective than a centralized approach.

The disadvantages of the decentralized organizational structure fall into the following categories:

1. Lacks a strong, central coordinator
2. Coordination of preparatory curriculum suffers or is made more difficult.
3. Common concerns may not be shared as often.
4. College-level faculty not attuned to students who are "at risk" academically.

Perhaps the best summary of the dichotomy of views concerning the centralized/decentralized issue is voiced by one of the survey respondents:

> There is a divergence of opinion on this matter. The academic divisions see the decentralized organization with instruction by the same instructors who will teach college level work as easing transition. The lab personnel, on the other hand, point out that the academics have little training in intervention instruction, and are interested primarily in the better prepared student.

While research indicates that centralized structures work most effectively (Boylan, 1993), it seems either structure can work providing there is strong advocacy for the program, mutual respect and communication among college and preparatory faculty members, and a thorough understanding of the organizational culture of the institution.

Success Rates

Central to having a complete picture of college/vocational preparatory programs is the ability to produce reliable data on success factors for this population. How many successfully complete preparatory courses in math, reading, and English? How many drop out and why? Of those who successfully complete preparatory courses, how many proceed to and succeed in college level courses? Ultimately, what percentage of preparatory students

persist through graduation, and how does this percentage compare with graduation rates of non-preparatory students?

While the State has not yet produced reports that track college/ vocational students through to graduation, new accountability measures have paved the way for colleges to report data in a uniform manner so that such information will be the result. Preliminary cohort data reported in the Interim Accountability Report (1993) demonstrate that these programs are successful. In tracking selected students from 1990-1992, results indicate 67 percent passed reading, 68 percent passed writing, and 52 percent passed math. (See Appendix D, p. 93) The data also show that 70.49 percent of this student cohort passed the College Level Academic Skills Test (CLAST). (See Appendix D, p. 94) This is a first step in what is expected to be a continually improving data base on preparatory students. Data will be expanded in the coming years eventually enabling the Division to track college preparatory students in cohort fashion from entry to exit. While some colleges may already have this capability, it is not yet common to all institutions, nor has it been historically reported to the Division in uniform fashion. The following recommendation is made because of the need for uniformity in reporting data so that sound decisions regarding the education of students can be made.

3. Recommend that uniform procedures as defined in State accountability measures for tracking of college/vocational preparatory student outcomes be maintained by all institutions.

In following through on this recommendation, institutions should utilize accountability reports and other existing data to make academic management decisions that will improve student success. In addition, the SBCC should continue to monitor the progress and success of preparatory students at the state level and make appropriate academic decisions based on the findings.

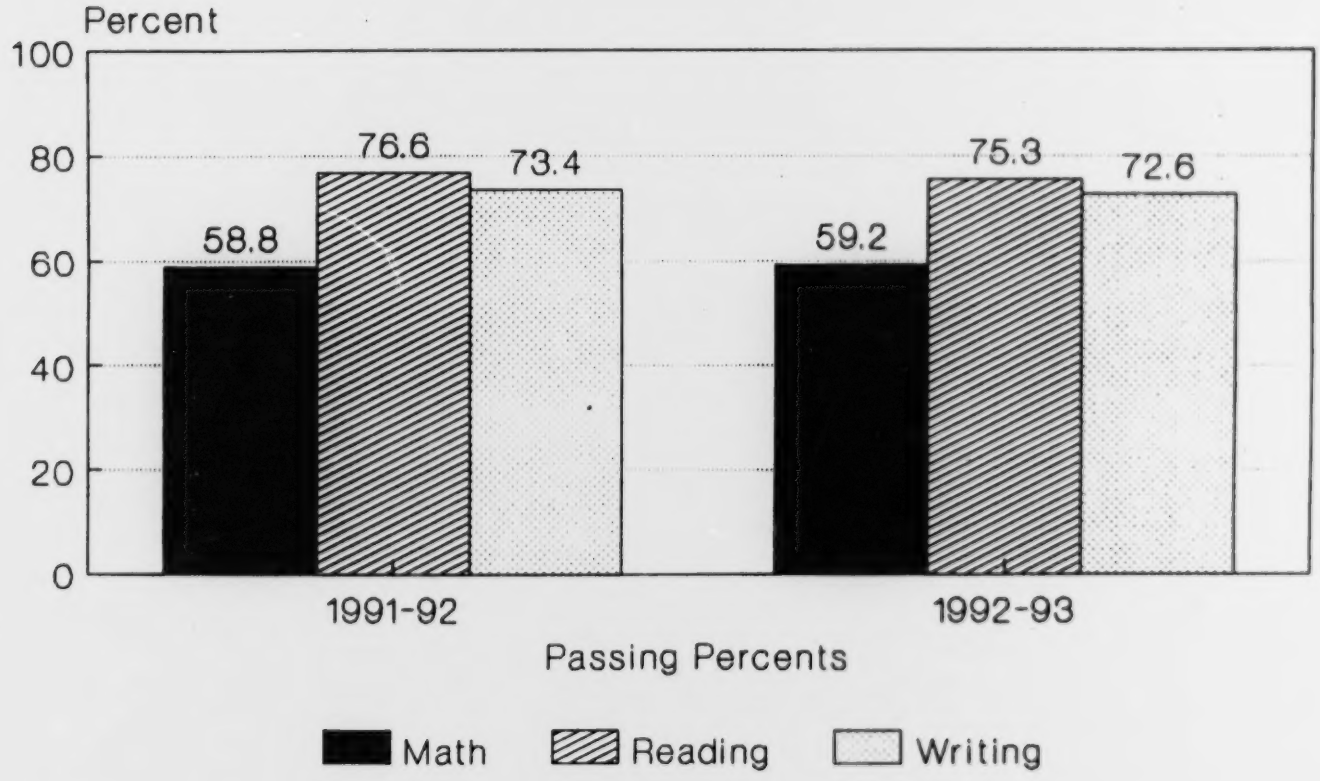
In addition to the accountability data, the graphs and tables on the following pages contain the unduplicated headcount of all students enrolled in college preparatory courses at Florida's community colleges as well as the numbers and percentages of students passing or failing math, reading, and writing for reporting years 1991-1992 and 1992-1993. For academic year 1992-1993, 59.2 percent passed math, 75.3 percent passed reading and 72.6 percent passed writing. The preceding year's percentages varied only slightly. In addition, pie charts are included that show passing or failing in college preparatory courses based on ethnic category for 1992-93.

Based on those passage rates, it appears that preparatory programs are relatively successful in reading and writing, but passing rates in mathematics remain troublesome. When further cohort data is produced, more information will be available to illustrate how well these students actually do when they enroll in college level classes. Also, the tendency toward grade inflation, a nation-wide problem from which the state of Florida is not exempt, may distort passage rates for reading and writing. If passing grades in a course were combined with exit testing scores or the scores from a re-take of the placement

Graph 1.

College Preparatory Performance

Percent Passing for 1991-92 and 1992-93



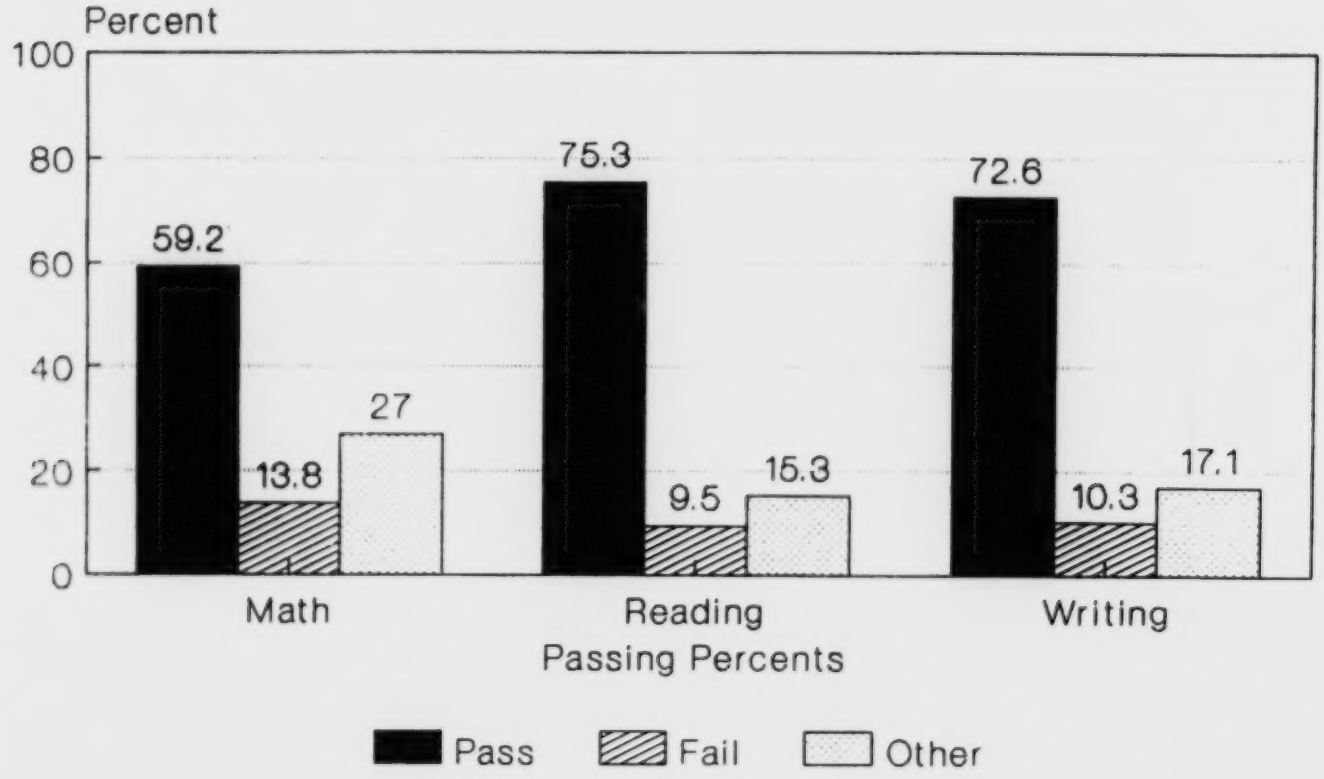
Division of Community Colleges, 1994

Other=Students who withdraw, audit, or are incomplete.

Graph 2.

College Preparatory Performance

Percent Pass, Fail, or Other 1992-93



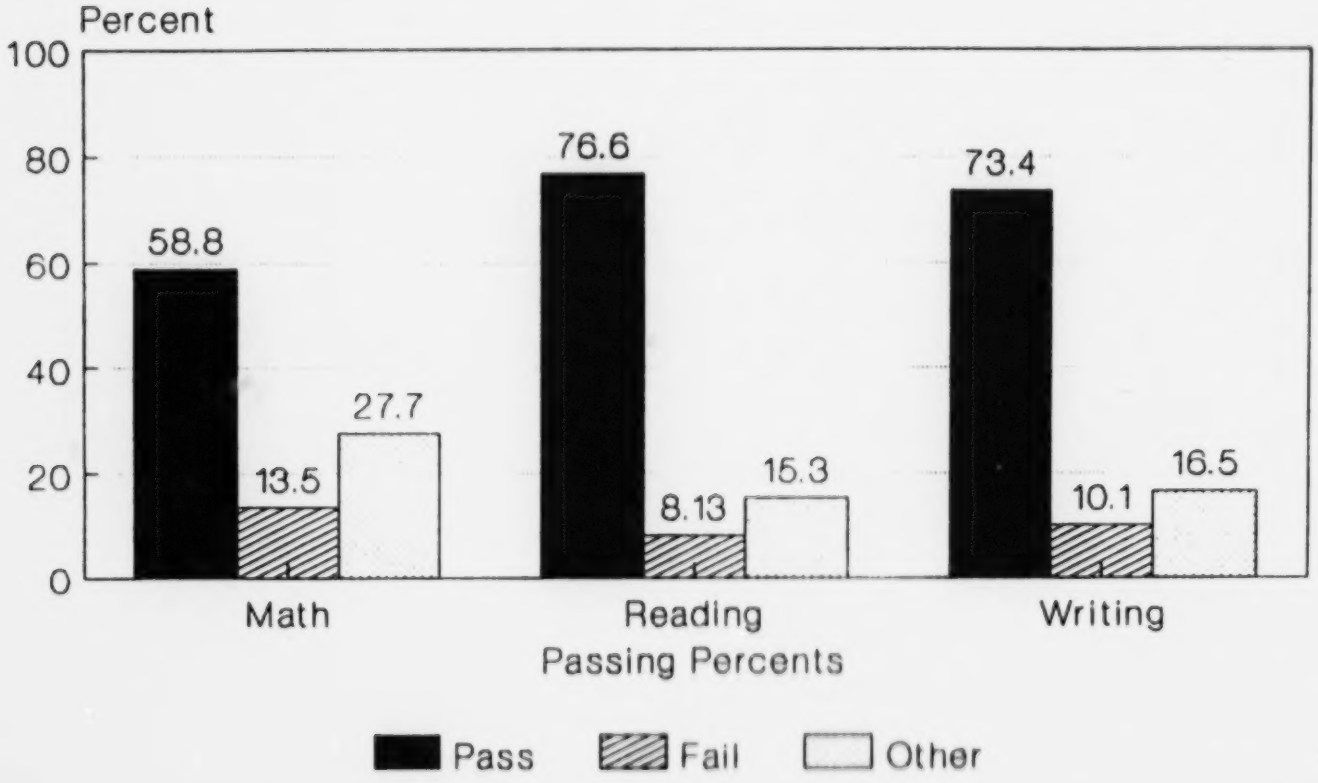
Division of Community Colleges, 1994

Other=Students who withdraw, audit or are incomplete

Graph 3.

College Preparatory Performance

Percent Pass, Fail, or Other 1991-92



Division of Community Colleges, 1994
Other=Students who withdraw, audit, or are incomplete.

TABLE 2.

FLORIDA COMMUNITY COLLEGES

FLORIDA COMMUNITY COLLEGE SYSTEM
COLLEGE PREPARATORY COURSE INFORMATION

REPORTING YEAR: 1992-1993

ADHOC REQUEST
11/19/93
8 44 39

COLLEGE	UNDUPLICATED COLLEGE PREP HEADCOUNT	COLLEGE PREP GRADES AWARDED								
		MATH			READING			WRITING		
		PASSED	FAILED	OTHER	PASSED	FAILED	OTHER	PASSED	FAILED	OTHER
BREVARD	3,422	1,869	661	596	553	66	40	644	123	131
BROWARD	9,323	4,923	328	3,131	1,511	155	360	2,469	108	726
CENTRAL FLORIDA	1,741	1,340	8	171	473	0	64	533	0	53
CHIPOLA	509	204	84	38	93	19	15	219	65	24
DAYTONA BEACH	2,994	1,810	630	487	274	60	58	559	58	75
EDISON	2,689	1,680	248	831	381	29	190	416	42	258
FLA CC AT JAX	6,768	3,766	807	844	635	43	78	1,002	77	105
FLORIDA KEYS	364	227	24	62	64	1	21	80	1	27
GULF COAST	1,893	1,827	258	498	315	9	83	890	22	203
HILLSBOROUGH	6,642	6,713	1,386	2,759	2,422	359	357	4,077	838	995
INDIAN RIVER	2,245	1,169	202	556	453	73	112	713	195	217
LAKE CITY	965	606	241	283	187	20	20	181	28	37
LAKE-SUMTER	693	435	169	151	67	26	8	111	25	24
MANATEE	1,867	1,413	24	457	200	3	29	445	8	101
MIAMI-DADE	20,780	8,744	2,835	3,501	6,779	784	1,272	12,897	1,322	2,382
NORTH FLORIDA	269	181	71	52	49	27	14	91	25	27
OKALOOSA-WALTON	1,689	1,137	188	335	194	13	38	198	62	76
PALM BEACH	4,697	1,533	2,070	929	575	355	158	808	529	217
PASCO-HERNANDO	1,477	795	240	206	123	24	10	647	111	85
PENSACOLA	2,327	1,402	1	591	709	9	196	312	0	78
POLK	2,137	1,021	303	665	316	43	95	699	103	243
ST. JOHNS RIVER	822	480	31	152	69	3	25	309	23	71
ST. PETERSBURG	9,182	4,534	583	3,433	855	53	234	1,719	295	554
SANTA FE	3,717	3,449	1,401	1,206	1,951	289	256	2,018	560	550
SEMINOLE	2,141	1,136	124	631	303	4	51	812	44	294
SOUTH FLORIDA	385	200	56	65	71	6	3	82	29	13
TALLAHASSEE	2,727	1,330	464	508	524	76	64	1,037	150	174
VALENCIA	7,419	4,212	156	3,385	1,027	112	445	1,451	202	619
SYSTEM TOTAL	101,884	58,136	13,593	26,523	21,173	2,661	4,296	35,439	5,045	8,361

Numbers in the first column are unduplicated, but the numbers in the remaining columns are duplicated since a given student could potentially be enrolled in all three courses.

SOURCE 1992 - 1993 STUDENT DATA BASE

TABLE 3.

FLORIDA COMMUNITY COLLEGES

FLORIDA COMMUNITY COLLEGE SYSTEM
PERCENTAGE OF COLLEGE PREPARATORY COURSE INFORMATION

REPORTING YEAR: 1992-1993

AD HOC REQUEST
11/19/93
11 30 39

COLLEGE	UNDUPLICATED COLLEGE PREP HEADCOUNT	COLLEGE PREP GRADES AWARDED: MATH %PASSED	MATH %FAILED	MATH %OTHER	READING %PASSED	READING %FAILED	READING %OTHER	WRITING %PASSED	WRITING %FAILED	WRITING %OTHER
BREVARD	3,422	59 8	21 1	19 1	83 9	10 0	6 1	71 7	13 7	14 6
BROWARD	9,323	58 7	3 9	37 4	74 6	7 7	17 8	74 8	3 3	22 0
CENTRAL FLORIDA	1,741	88 2	0 5	11 3	88 1	0 0	11 9	91 0	0 0	9 0
CHIPOLA	509	62 6	25 8	11 7	73 2	15 0	11 8	71 1	21 1	7 8
DAYTONA BEACH	2,994	61 8	21 5	16 6	69 9	15 3	14 8	80 8	8 4	10 8
EDISON	2,689	60 9	9 0	30 1	63 5	4 8	31 7	58 1	5 9	36 0
FLA CC AT JAX	6,768	69 5	14 9	15 6	84 0	5 7	10 3	84 6	6 5	8 9
FLORIDA KEYS	364	72 5	7 7	19 8	74 4	1 2	24 4	74 1	0 9	25 0
GULF COAST	1,893	70 7	10 0	19 3	77 4	2 2	20 4	79 8	2 0	18 2
HILLSBOROUGH	6,642	61 8	12 8	25 4	77 2	11 4	11 4	69 0	14 2	16 8
INDIAN RIVER	2,245	60 7	10 5	28 9	71 0	11 4	17 6	63 4	17 3	19 3
LAKE CITY	965	53 6	21 3	25 0	82 4	8 8	8 8	73 6	11 4	15 0
LAKE-SUMTER	693	57 6	22 4	20 0	66 3	25 7	7 9	69 4	15 6	15 0
MANATEE	1,867	74 6	1 3	24 1	86 2	1 3	12 5	80 3	1 4	18 2
MIAMI-DADE	20,780	58 0	18 8	23 2	76 7	8 9	14 4	77 7	8 0	14 3
NORTH FLORIDA	269	59 5	23 4	17 1	54 4	30 0	15 6	63 6	17 5	18 9
OKALOOSA-WALTON	1,689	68 5	11 3	20 2	79 2	5 3	15 5	58 9	18 5	22 6
PALM BEACH	4,697	33 8	45 7	20 5	52 8	32 6	14 5	52 0	34 0	14 0
PASCO-HERNANDO	1,477	64 1	19 3	16 6	78 3	15 3	6 4	76 7	13 2	10 1
PENSACOLA	2,327	70 3	0 1	29 6	77 6	1 0	21 4	80 0	0 0	20 0
POLK	2,137	51 3	15 2	33 4	69 6	9 5	20 9	66 9	9 9	23 3
ST JOHNS RIVER	822	72 4	4 7	22 9	71 1	3 1	25 8	76 3	5 7	18 0
ST PETERSBURG	9,182	53 0	6 8	40 2	74 9	4 6	20 5	66 9	11 5	21 6
SANTA FE	3,717	57 0	23 1	19 9	78 2	11 6	10 3	64 5	17 9	17 6
SEMINOLE	2,141	60 1	6 6	33 4	84 6	1 1	14 2	71 1	3 8	25 1
SOUTH FLORIDA	385	62 3	17 4	20 2	88 8	7 5	3 8	66 1	23 4	10 5
TALLAHASSEE	2,727	57 8	20 2	22 1	78 9	11 4	9 6	76 2	11 0	12 8
VALENCIA	7,419	54 3	2 0	43 7	64 8	7 1	28 1	63 9	8 9	27 2
SYSTEM TOTAL	101,884	59 2	13 8	27 0	75 3	9 5	15 3	72 6	10 3	17 1

Numbers in the first column are unduplicated, but the numbers in the remaining columns are duplicated since a given student could potentially be enrolled in all three courses.

SOURCE 1992 - 1993 STUDENT DATA BASE

TABLE 4.

FLORIDA COMMUNITY COLLEGES

FLORIDA COMMUNITY COLLEGE SYSTEM
COLLEGE PREPARATORY COURSE INFORMATION

REPORTING YEAR 1991-1992

ADHOC REQUEST
11/19/93
13 44 13

COLLEGE	UNDUPLICATED COLLEGE PREP HEADCOUNT	COLLEGE PREP. GRADES AWARDED								
		MATH			READING			WRITING		
		PASSED	FAILED	OTHER	PASSED	FAILED	OTHER	PASSED	FAILED	OTHER
BREVARD	3,705	2,147	591	574	646	63	53	714	145	178
BROWARD	8,695	4,676	311	3,024	1,253	119	264	2,148	78	601
CENTRAL FLORIDA	1,577	947	0	220	409	0	55	593	0	65
CHIPOLA	516	249	67	36	109	9	19	263	54	31
DAYTONA BEACH	2,965	1,749	266	683	377	2	128	668	11	161
EDISON	2,775	1,488	333	885	838	40	353	723	15	190
FLA CC AT JAX	6,001	3,011	623	720	822	46	83	1,033	92	115
FLORIDA KEYS	363	179	19	80	51	1	21	93	1	22
GULF COAST	1,736	1,781	247	445	204	10	44	883	11	189
HILLSBOROUGH	6,050	5,818	1,269	2,490	2,219	276	289	3,918	640	708
INDIAN RIVER	2,137	1,008	207	420	289	60	100	979	184	260
LAKE CITY	1,023	665	238	217	238	13	17	201	30	26
LAKE-SUMTER	683	348	130	226	64	16	19	131	25	27
MANATEE	1,801	1,443	28	356	176	2	36	439	8	104
MIAMI-DADE	20,807	9,521	2,363	3,564	6,254	644	906	12,661	1,406	2,152
NORTH FLORIDA	259	205	65	54	60	2	9	98	5	13
OKALOOSA-WALTON	1,612	1,008	202	308	156	13	19	289	39	64
PALM BEACH	4,885	1,511	2,142	1,014	643	359	183	892	556	298
PASCO-HERNANDO	1,318	673	197	147	130	17	10	666	92	34
PENSACOLA	2,266	1,371	1	564	717	9	249	268	0	59
POLK	1,978	892	349	647	281	58	53	569	114	165
ST. JOHNS RIVER	698	392	20	152	45	5	12	254	13	51
ST. PETERSBURG	8,074	3,330	476	2,720	653	30	296	1,423	221	433
SANTA FE	3,598	3,133	1,489	1,264	1,974	172	291	1,643	586	526
SEMINOLE	2,055	1,144	108	659	244	2	65	644	31	291
SOUTH FLORIDA	353	146	42	71	65	6	13	122	20	19
TALLAHASSEE	2,831	1,366	446	544	507	73	77	1,029	158	130
VALENCIA	6,500	3,356	57	3,164	807	84	386	1,123	209	614
SYSTEM TOTAL	97,261	53,557	12,286	25,248	20,231	2,131	4,050	34,467	4,744	7,726

Numbers in the first column are unduplicated, but the remaining columns are duplicated since a given student could potentially be enrolled in all three courses.

SOURCE: 1991 - 1992 STUDENT DATA BASE

TABLE 5.

FLORIDA COMMUNITY COLLEGES

FLORIDA COMMUNITY COLLEGE SYSTEM
PERCENTAGE OF COLLEGE PREPARATORY COURSE INFORMATION

REPORTING YEAR: 1991-1992

AD HOC REQUEST
11/19/93
13:45:57

COLLEGE	UNDUPLICATED COLLEGE PREP HEADCOUNT	COLLEGE PREP. GRADES AWARDED								
		MATH			READING			WRITING		
		%PASSED	%FAILED	%OTHER	%PASSED	%FAILED	%OTHER	%PASSED	%FAILED	%OTHER
BREVARD	3,705	64.8	17.8	17.3	84.8	8.3	7.0	68.9	14.0	17.2
BROWARD	8,695	58.4	3.9	37.7	76.6	7.3	16.1	76.0	2.8	21.3
CENTRAL FLORIDA	1,577	81.1	0.0	18.9	88.1	0.0	11.9	90.1	0.0	9.9
CHIPOLA	516	70.7	19.0	10.2	79.6	6.6	13.9	75.6	15.5	8.9
DAYTONA BEACH	2,965	64.8	9.9	25.3	74.4	0.4	25.2	79.5	1.3	19.2
EDISON	2,775	55.0	12.3	32.7	68.1	3.2	28.7	64.1	1.3	34.6
FLA CC AT JAX	6,001	69.2	14.3	16.5	86.4	4.8	8.7	83.3	7.4	9.3
FLORIDA KEYS	363	64.4	6.8	28.8	69.9	1.4	28.8	80.2	0.9	19.0
GULF COAST	1,736	72.0	10.0	18.0	79.1	3.9	17.1	81.5	1.0	17.5
HILLSBOROUGH	6,050	60.7	13.3	26.0	79.7	9.9	10.4	74.4	12.2	13.4
INDIAN RIVER	2,137	61.7	12.7	25.7	64.4	13.4	22.3	68.8	12.9	18.3
LAKE CITY	1,023	59.4	21.3	19.4	88.8	4.9	6.3	78.2	11.7	10.1
LAKE-SUMTER	683	49.4	18.5	32.1	64.6	16.2	19.2	71.6	13.7	14.8
MANATEE	1,801	79.0	1.5	19.5	82.2	0.9	16.8	79.7	1.5	18.9
MIAMI-DADE	20,807	61.6	15.3	23.1	80.1	8.3	11.6	78.1	8.7	13.3
NORTH FLORIDA	259	63.3	20.1	16.7	84.5	2.8	12.7	84.5	4.3	11.2
OKALOOSA-WALTON	1,612	66.4	13.3	20.3	83.0	6.9	10.1	73.7	9.9	16.3
PALM BEACH	4,885	32.4	45.9	21.7	54.3	30.3	15.4	51.1	31.8	17.1
PASCO-HERNANDO	1,318	66.2	19.4	14.5	82.8	10.8	6.4	84.1	11.6	4.3
PENSACOLA	2,266	70.8	0.1	29.1	73.5	0.9	25.5	82.0	0.0	18.0
POLK	1,978	47.2	18.5	34.3	71.7	14.8	13.5	67.1	13.4	19.5
ST JOHNS RIVER	698	69.5	3.5	27.0	72.6	8.1	19.4	79.9	4.1	16.0
ST PETERSBURG	8,074	51.0	7.3	41.7	66.7	3.1	30.2	68.5	10.6	20.8
SANTA FE	3,598	53.2	25.3	21.5	81.0	7.1	11.9	59.6	21.3	19.1
SEMINOLE	2,055	59.9	5.7	34.5	78.5	0.6	20.9	66.7	3.2	30.1
SOUTH FLORIDA	353	56.4	16.2	27.4	77.4	7.1	15.5	75.8	12.4	11.8
TALLAHASSEE	2,831	58.0	18.9	23.1	77.2	11.1	11.7	78.1	12.0	9.9
VALENCIA	6,500	51.0	0.9	48.1	63.2	6.6	30.2	57.7	10.7	31.6
SYSTEM TOTAL	97,261	58.8	13.5	27.7	76.6	8.1	15.3	73.4	10.1	16.5

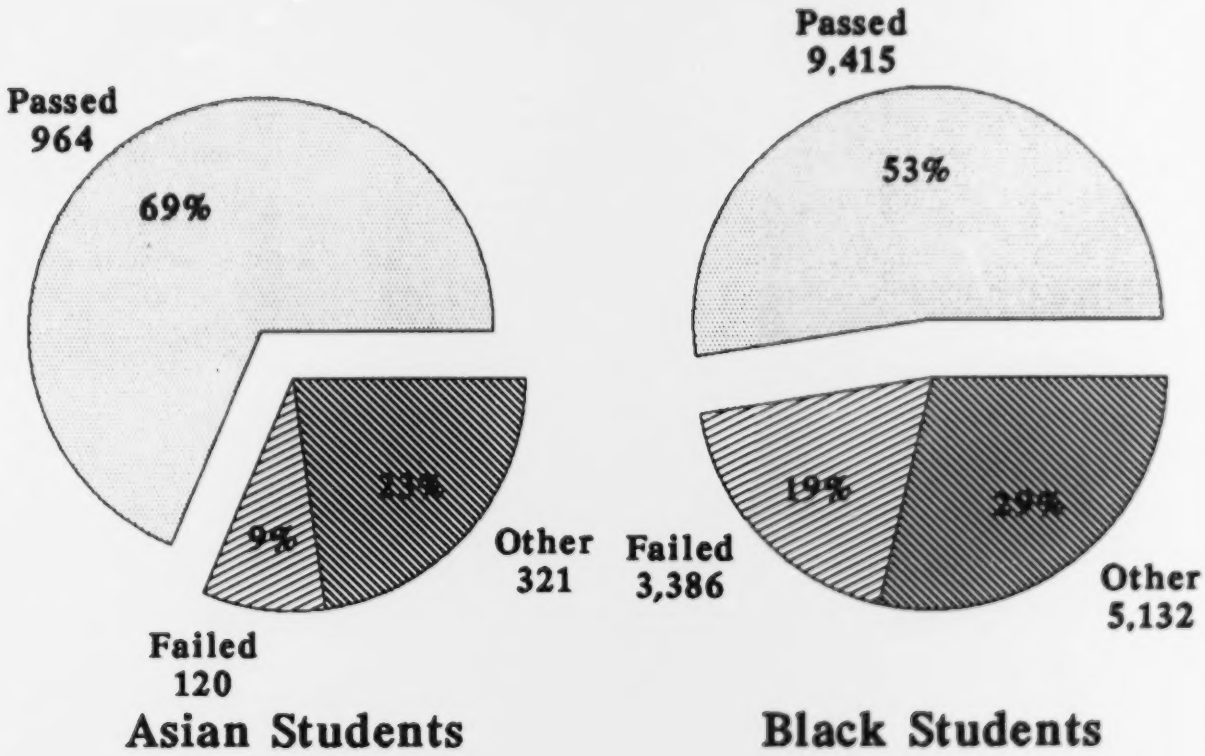
Numbers in the first column are unduplicated, but the remaining columns are duplicated since a given student could potentially be enrolled in all three courses.

SOURCE: 1991 - 1992 STUDENT DATA BASE

GRAPH 4

College Preparatory Course Information

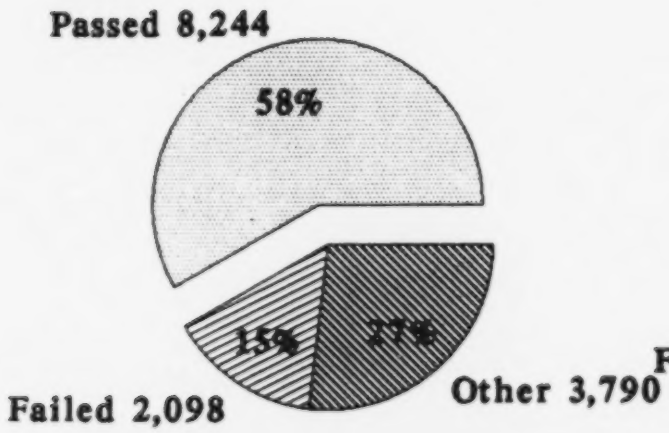
Percentages for Math Performance By Ethnic Group



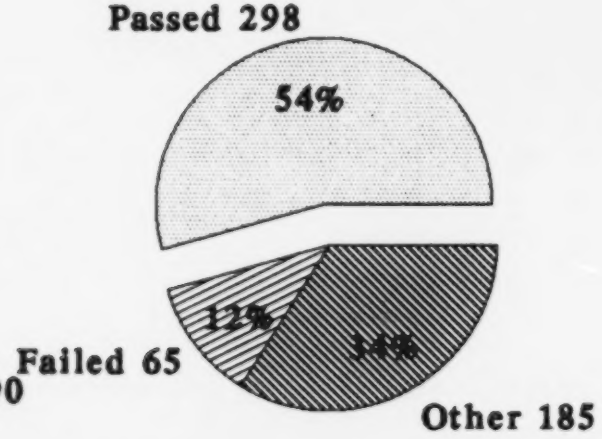
Division of Community Colleges, 1992-93

GRAPH 4

College Preparatory Course Information
Percentages for Math Performance
By Ethnic Group



Hispanic Students

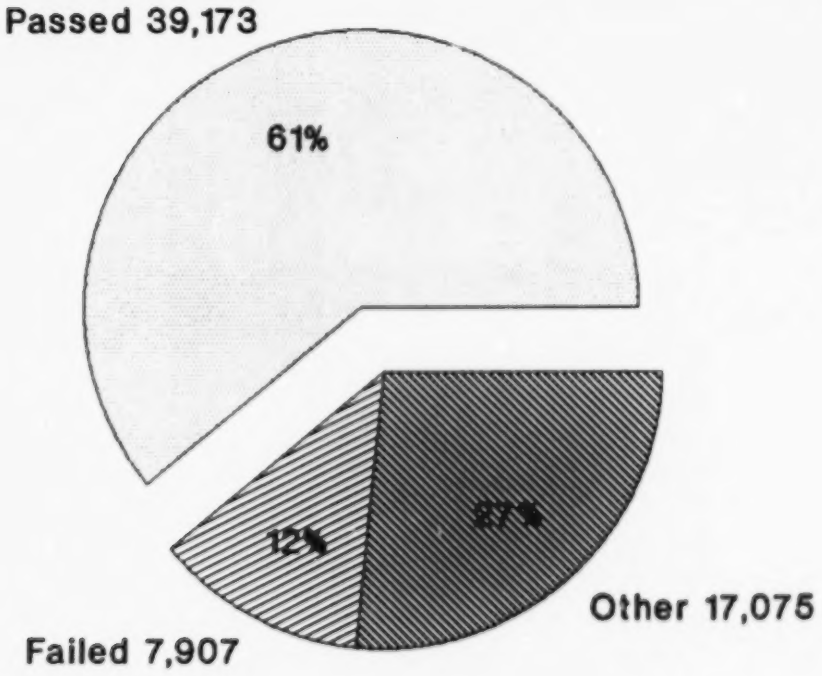


American Indian Students

Division of Community Colleges, 1992-93

GRAPH 4

College Preparatory Course Information
Percentages for Math Performance
By Ethnic Group



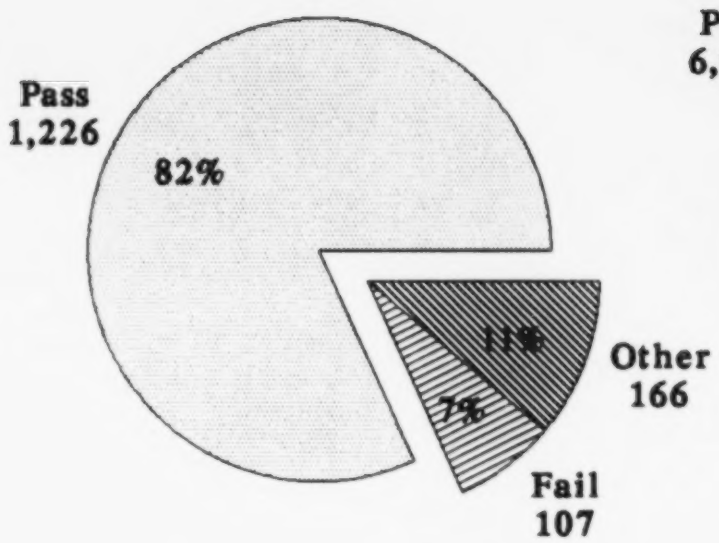
White Students

Division of Community Colleges, 1992-93

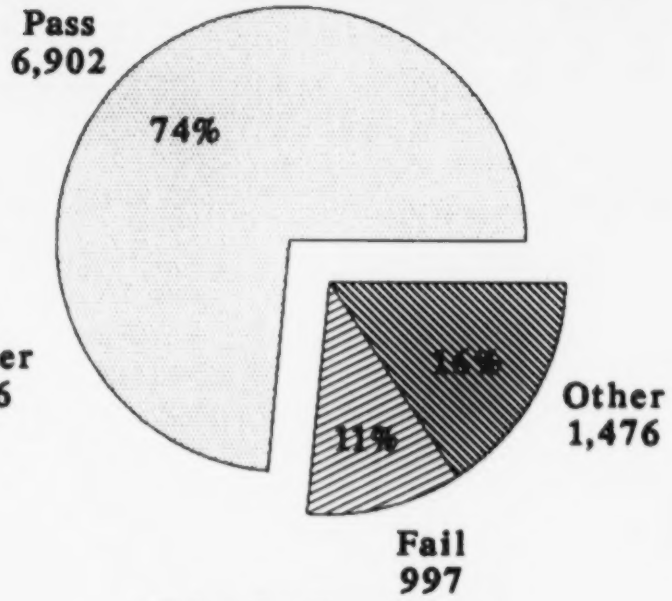
GRAPH 5

College Preparatory Course Information

Percentages for Reading Performance By Ethnic Group



Asian Students



Black Students

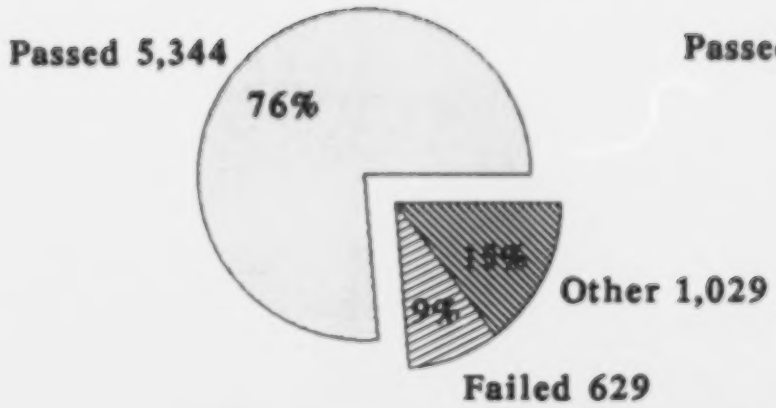
53

54

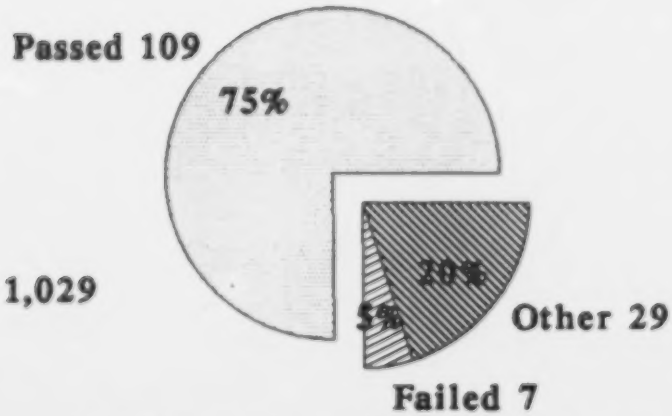
Division of Community Colleges, 1992-93

GRAPH 5

College Preparatory Course Information
Percentages for Reading Performance
By Ethnic Group



Hispanic Students

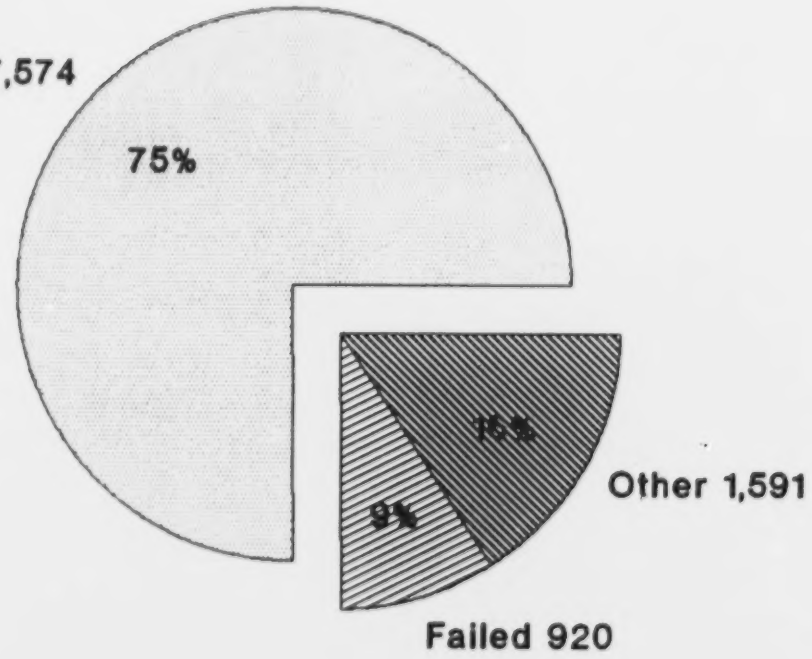


American Indian Students

Division of Community Colleges, 1992-93

GRAPH 5

College Preparatory Course Information
Percentages for Reading Performance
By Ethnic Group



57

White Students

53

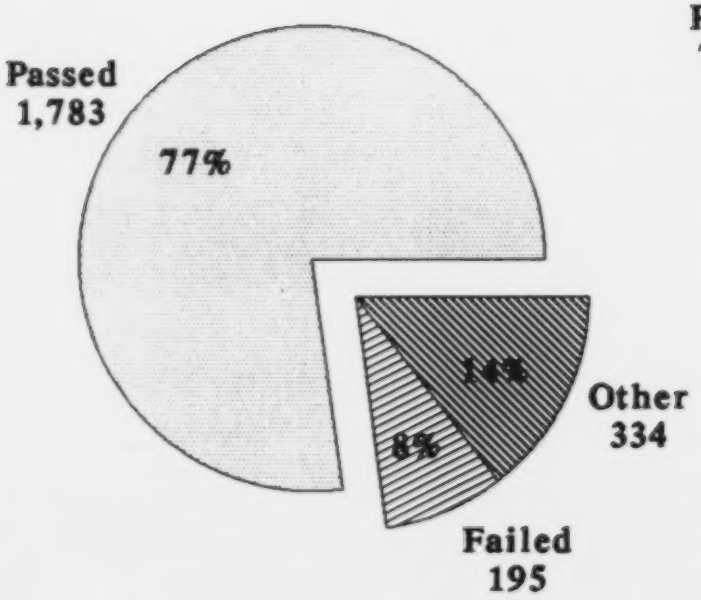
42

Division of Community Colleges, 1992-93

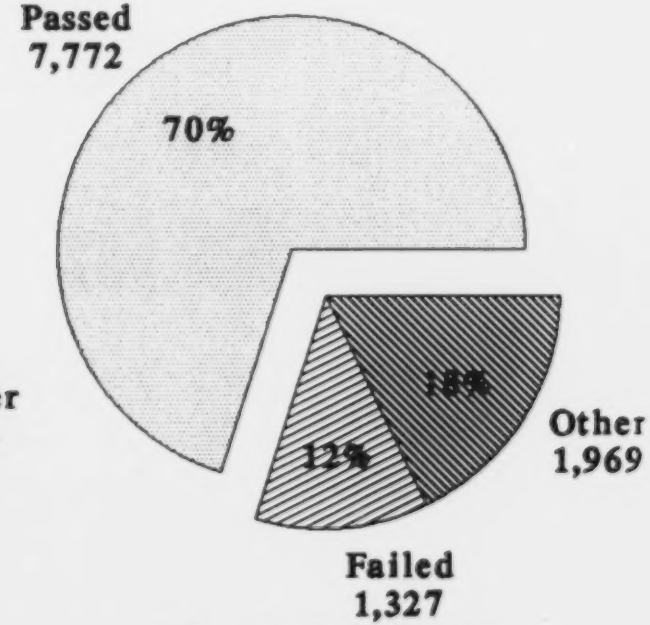
GRAPH 6

College Preparatory Course Information

Percentages for Writing Performance By Ethnic Group



Asian Students

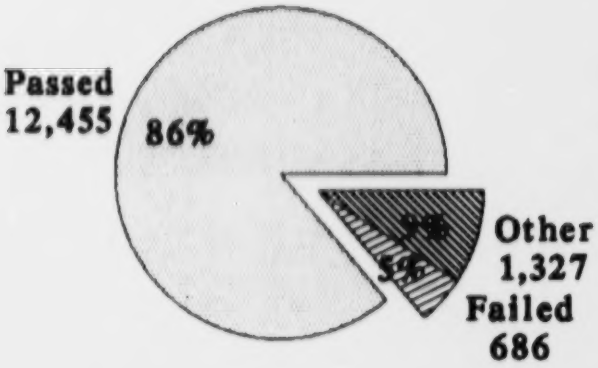


Black Students

Division of Community Colleges, 1992-93

GRAPH 6

College Preparatory Course Information
Percentages for Writing Performance
By Ethnic Group



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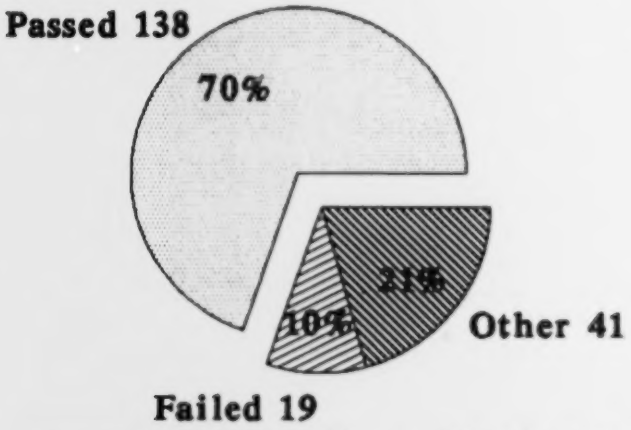
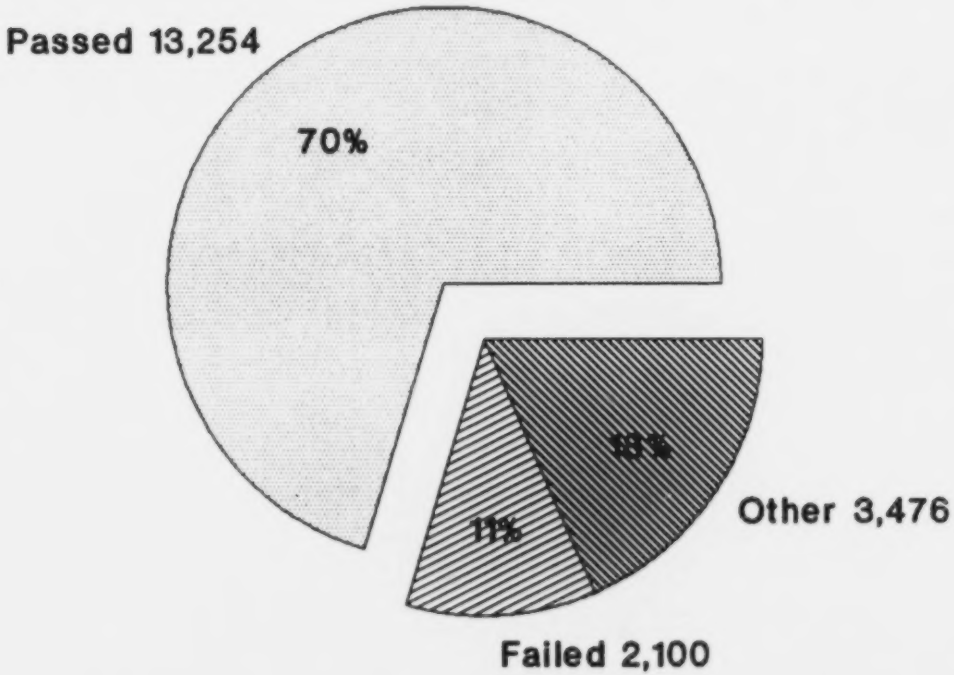


American Indian Students

Division of Community Colleges, 1992-93

GRAPH 6

College Preparatory Course Information
Percentages for Writing Performance
By Ethnic Group



White Students

Division of Community Colleges, 1992-93

test, as was recommended by the House Postsecondary Education Committee (1992), there would be greater corroboration for the passing grade in the course. The ultimate measure, of course, would be the degree to which they are successful in college-level courses and the degree to which they achieve their declared educational goals.

The 1992 Accountability Report for the Community College System contains the following measure:

> The measure will first look at the number of college preparatory students at each college and the success rate of these students as measured by the percentage of students who successfully passed a preparatory class. Secondly, the success of college preparatory students over time in their college careers will be examined. The report will show the percentage that graduated, are still enrolled in good standing or not in good standing. These students will be followed through their academic careers for two years after they complete their college preparatory work. The students will also be looked at by ethnic group. (p. 5)

According to the projected timeline for these accountability measures, part one of this measure was completed in winter of 1993 and is included in this report. The remaining portions of the measure will be available in coming years. This longitudinal data responds to recommendations made by both PEPC and the House Postsecondary Education Committee.

Perception of Preparatory Programs

How are preparatory programs perceived? Seventy-five percent of the respondents viewed preparatory programs as an essential part of the college mission. The remaining 25 percent felt it was secondary to the primary

mission of providing college education for eligible students. All of the respondents stated, however, that preparatory faculty were accepted in the same manner as college-level faculty. Based on those responses, it would appear that much of the stigma for preparatory instruction has faded. However, there were indications in responses to other questions that some bias still remains. Several references were made to "second class faculty" and the "stigma" attached to preparatory programs.

Faculty

Only 8 of the colleges indicated that college preparatory programs were the primary responsibility of the directors/coordinators in charge. The remaining 20 institutions stated that their directors or coordinators have multiple roles to preform. Sixteen of the directors have specialized training to work with "at risk" students while 11 do not. The majority of preparatory instructors have master's degrees, but there is heavy reliance on the use of part-time faculty to teach preparatory courses. A few institutions indicated that 100 percent of their preparatory faculty were part-timers. Other institutions touted the benefits of having both college-level and prep-level instructors doing the teaching. They felt this produced a more confident preparatory student, provided for a more seamless flow through the educational system, and promoted college-level faculty who were more sensitive to the needs of "at risk"/developmental students.

More faculty who work with preparatory students are specialists in the subject matter area than are specialists in working with "at risk" students. There are greater numbers of part-time faculty than full-time faculty with at least four institutions employing anywhere from 80 to 100 percent adjunct faculty. Another five colleges indicated that anywhere from 80-100 percent of preparatory faculty were full-time instructors. The remaining colleges tended to fall anywhere from 25-70 percent in either category. The most prevalent degree held is a master's degree. There are significant numbers of bachelor's degree faculty working with preparatory students. According to a few of the professionals who were interviewed, the bachelor's level instructor is sometimes more effective with this student population because they relate well to the needs of the preparatory student and are receptive to directions from directors and coordinators of preparatory programs. Others contend that using college-level instructors promotes continuity for students. They are uncomfortable with such heavy reliance on part-time faculty. These are valid concerns. What seems appropriate, however, is to develop policies at the local level that are in keeping with the recommendations made in Gappa and Leslie's (1993) study on the use of part-time faculty. That is, proactive plans should be made for part-timers. An active pool of teacher candidates should be readily available, and, once hired, they should be provided mentoring and close guidance by master teachers in the system. In addition, Southern Association of Colleges and Schools (SACS) criteria state, "Faculty members who teach in

remedial programs **must** have a bachelor's degree in a discipline related to their teaching assignment and either classroom experience in a discipline related to their teaching assignment or graduate training in remedial education" (p. 37). Regardless of the degree of training they have with "at risk" students, the successful instructors are those who WANT to teach this student population and who have sensitivity to their special needs.

Instructional Methods

Overwhelmingly the most popular method of instruction for this population was through standardized semester-length courses augmented by lab support. Twenty-three of the 28 colleges indicated this was the method they most preferred. Twenty-one of the colleges required lab attendance for preparatory students. Usually a prescribed number of hours (1-2 hours per week) are required for the preparatory student to attend, but students may spend more time than the required amount if necessary. In these labs they have access to qualified instructors and/or peer tutors to give them one-on-one assistance. Vocational preparatory courses are more often covered through self-paced, individualized, open-entry/open-exit type programs called SAIL (System for Applied Individualized Learning) labs. Most often, these vocational students are tested on the TABE (Test of Adult Basic Education) which is different from the mandated entrance tests. While this approach may work for some students, critics of the program state: "This system lacks

structure which is critical for underprepared students. It is not the most effective instructional delivery, and it would be more efficient and effective if vocational preparatory and college preparatory students were enrolled in the same classes." On the other hand, some preparatory professionals advocated that more efforts should be made to structure remedial courses in a fashion that would allow students to move through in a self-paced manner. The key to the success of any self-paced and/or intensive program seems to rest on two key factors: the motivation of the student and the degree to which quality tutoring/instruction is provided when the student needs it. Most faculty who work with preparatory students tend to prefer a highly structured approach where students spend considerable time on task and have ample opportunity for reinforcement through lab work and tutoring.

Because there was a lack of specific information about vocational preparatory programs due to limitations of the survey instrument or for other reasons, the following recommendation is made:

4. Recommend that further review of vocational preparatory structures and procedures be initiated to assist in examining productivity of programs.

One of the colleges visited has an instructional format that is working well for them. College preparatory students are exposed to a large lecture session twice a week which they are all required to attend. The lecture is followed by smaller classroom sessions conducted three times per week. Then reinforcement activities and drill are conducted through required lab hours.

Master teachers instruct in the lecture sections and meet weekly with the largely adjunct instructors who teach the college preparatory classes. The master teachers coordinate all aspects of instruction, direct and train the adjuncts, and see that there is consistency with regard to when and what subject matter is covered. Special computerized modules developed by the faculty are used in the lab sessions thus tailoring the instruction to the needs of the student. Overall, they have experienced high success rates with their college preparatory students and have been able to document that well over 80 percent of college preparatory students who have taken the first college-level course in English have passed and over 60 percent have been successful in college-level math. Over 30 percent of their students have persisted through graduation.

Of the 28 community colleges 10 indicated that vocational and college preparatory students were taught in separate programs while 11 others stated they were taught in the same courses. The statewide average class size based on averages given from each of the 28 colleges are as follows:

Reading = 20 Writing = 20 Math = 25 ESL = 17

The range of average class sizes varied from 5 to 40.

Those who teach and coordinate preparatory courses shared some insights as to what instructional approaches work best with these students. It is universally agreed that these students need classroom work supplemented by lab activities. Classes should be small so that students can have meaningful

interaction with the instructor. Lab work should provide ample opportunity for one-on-one assistance. Individualized instruction targeted to the student's unique needs is essential. Computer-assisted instruction, collaborative learning through small groups, discipline-specific study skills, self-esteem activities, and critical thinking/problem solving activities are all essential for these students.

The following survey responses convey meaningful descriptions of what is needed and/or what works for these students:

> --One very basic issue is the student's defining his/her self as someone who wants to and can learn, and that it is okay to be successful. Students must have a peer group that suggests achievement and an acceptance of responsibility for personal decisions supporting accomplishments.
>
> --To provide extensive time on task and varied instructional methods while acknowledging varied levels of preparedness and learning styles, a combination of instructional methods including lecture, class AND lab is the most successful. Opportunities that provide structured, repetitive activities are critical.
>
> --Our experience to date has been in semester-length courses meeting three hours per week supplemented by two hours of lab work. This traditional format does not work for a large percentage of college prep students. These students arrive with academic deficiencies having a variety of causes--social, economic, maturational, learning style, personal (self-image, self-esteem, etc.). Some have been away from school for years and their skills have eroded. Others never mastered the skills. As a result, they will overcome their deficiencies and progress at different rates and by different means. Nonetheless, we are currently offering them all the same format and methodology. We must move to open-entry/open-exit self-paced instruction. We must address the social and personal needs (currently ignored) as well as the academic. Courses must address goal setting, motivation, career/educational planning, time-management, and related coping skills. In short, we need to serve the individual as a unique, whole person whose needs may be commonplace in one sense but in a more important sense present a unique mix. Counseling and advising are as

> important as instructional methodology and must be integrated into a total program to serve each student.

The final quotation above raises several important concerns. The first relates to the configuration of classes. Even though the support for semester length courses with accompanying lab work was fairly universally endorsed, other faculty and administrators felt other approaches are needed. Being locked into semester structures often delays student progress. The legislature is advocating more timely progress in achieving educational goals. Consequently, having a more flexible approach would promote greater efficiency and is strongly encouraged for students who would benefit from such options. For those who need much structure and repetition, the traditional semester-length classes should still be an option. Intensive remediation for longer blocks of time during the summer may be another method of speeding up the process.

> **5. Recommend that community colleges explore creative and/or alternative approaches to college/vocational preparatory instructional strategies and course structures to promote, to the extent possible, the most time-efficient method for improving student skills.**

Need for Additional Support Services

Another area of great concern is the need for more counseling and advising. These students are not only deficient in academic skills areas but need much assistance with time management, individual goal-setting, career planning, self-esteem, and study skills. Several colleges have determined that

for the majority of these students a more intense, focused kind of counseling is needed. The following responses illustrate the need:

> We believe that the prep student is especially in need of focused, continual interaction with a counselor. Currently, because the number of guidance counselors is limited, no time is available for them to provide that close interaction and extra support. An intrusive counseling program is a necessity.

> Closer integration of student services and curriculum is needed. From the point of admission through counseling, assessment, and registration, college preparatory students need additional services and assistance. The academic division and the student services division need to work together more closely.

> More personalized educational planning is necessary for underprepared, often first-generation, college students. Counseling and advising is not sufficiently available at present. Ongoing motivational, personal, and even redirection counseling needs to be available throughout a student's education. Such services need to be triggered by and facilitated by an effective and easily accessible computerized student tracking system.

As part of this review, we were privileged to visit institutions which did place heavy emphasis on counseling. At least two of the community colleges who were visited as part of this study, have hired a counselor whose primary responsibility is to work with preparatory students. This individual assists the student at entry to the college, carefully monitors the student's academic progress, and periodically counsels/visits the students throughout his/her duration in the preparatory program. Another community college recently received federal funding which provides, among other things, a program of "intrusive" counseling for "at risk" students pursuing targeted allied health careers which provides similar kinds of services for students. These colleges,

along with several others, have recognized the need to develop programs that address a more comprehensive approach to assist these students. But in order to have these services, additional funding is needed. The counseling issue is one that deserves attention. Based on the merits of programs currently in operation, the following recommendations are made:

6. Recommend that increased funding be allocated for the establishment of more comprehensive and intensive counseling and teaching approaches for all community college/vocational preparatory students.

7. Recommend that each community college seek additional resources from federal, state, and/or private sources to assist in the development of intensive counseling and teaching approaches for preparatory students.

The Impact of Technology

Teaching preparatory students is becoming almost synonymous with using computers both in the classroom and in the labs. Twenty of the institutions indicated that they used them "almost always" or "often." The vast majority of faculty indicated that more computers and computerized networks and labs along with effective software instructional packages were needed to meet the growing numbers of students and the growing demand for individualized, self-paced materials to move students toward the completion of their educational goals in a more efficient manner. However, a critical component of effective use of computers and computerized instructional materials is having faculty and administrators who are skilled at using them.

As computerized systems and capabilities continue to escalate, faculty need to be updated continually and made to feel comfortable using the technology.

In reality, what too often happens is that administrators authorize the expenditure of significant funds for computerized instruction and because not all faculty are trained or committed to proper usage of the equipment, it is left underutilized. The harder reality is that students today must have word processing and other computer skills to be marketable in today's working world. Computer know-how is as essential today as pencil and paper was in yesterday's working society. By the same token, many faculty admitted that they are needful of the appropriate training and would like very much to receive it. Consequently, faculty **must** have opportunities to become thoroughly versed and confident about computer usage.

According to survey respondents and some of the people who were interviewed at various campuses, accessibility to computers is limited. Some have computerized labs at only one of multiple campuses. Some institutions have supplied each faculty member with a computer while other institutions have not. The following quotations indicate the needs that exist:

> --Increased funds for the purchase of computer equipment, staffing the labs, computer training for faculty, for reducing the class size average in college prep courses.
>
> --Training of faculty members to make them aware of software available to assist "at risk" developmental students.

--More computer hardware. More appropriate computer software. More technology training for faculty. More computer lab staff. More space for computers.

--More training in computer use for faculty. More computers and software packages for both students and faculty.

--Access to dedicated computer-equipped classrooms. State-of-the-art networking equipment and software. Access to instructional data bases.

--Greater availability of hardware and software in itself will improve accessibility and use. We find little reluctance or hesitancy on the part of instructors and/or students in the matter of technology enhanced instruction, especially in use of computers. Software which lets students have a "taste of success" early and a sense of control certainly improves use rate.

The utilization of computers is cost effective as the large number of tutors needed can be reduced or stabilized through the use of effective computer software. For that reason and based on the survey responses and the recommendations of the technology task force which is seeking to elevate and sophisticate technology usage at community colleges in the state, the following recommendations are made:

8. Recommend that efforts continue to secure funding for necessary computer hardware and software both for instructional purposes and for appropriate record keeping.

9. Recommend that community colleges extend faculty development programs in computer technology to insure that preparatory faculty and faculty in general are competent and confident in computer usage.

English as a Second Language (ESL)

The issue of increasing numbers of ESL students and accompanying complications keeps re-surfacing. It was discussed in both the Letters (1992) and the Mathematics (1993) program reviews, and it recurred with persistent urgency in both survey responses and in interview discussions for this preparatory review. The numbers of non-native speakers are growing daily and these increasing numbers are not just seen in south Florida. As one vice-president put it, "We've just seen the tip of the iceberg on this." ESL practitioners at the time of this writing are seeking to develop a consortia of ESL professionals statewide to begin to address some of their common concerns. Among those concerns are: (1) growing numbers of ESL students, (2) defining levels of ESL courses and subsequent course content, (3) consistency in course numbering once appropriate levels have been determined, (4) lack of appropriately qualified ESL instructors, (5) perceived lack of administrative support, and (6) inadequate placement instruments. Because there are so many needs which require further examination than can be provided here, we recommend as follows:

> **10. Recommend that a separate statewide program review of English as a Second Language programs be conducted as soon as is feasible.**

Follow-up on Preparatory Students

While the need for more uniform follow-up has been referred to earlier in this report and the need for consistent data bases emphasized, most of the colleges are engaging in some kind of follow-up on their students. Some colleges have relatively sophisticated computerized procedures, while others use more traditional procedures such as evaluations from the students and letters to students who have dropped out. Preparatory students who drop out of the program generally cite personal issues--"balancing family responsibilities, work responsibilities, financial problems, and instructor dissatisfaction" as reasons for leaving. Estimates are that approximately 50 percent of those who enter preparatory courses eventually drop out. It must be remembered, however, that many of these students leave in good academic standing. Consequently, academic performance is not the only factor to consider in analyzing why students drop out. On the other hand, professionals working with preparatory students state: "Statistics reveal that students who begin in the lowest level of college prep generally do not complete the entire program. Statistics also show that if students have a "C" in college preparatory courses, they are unlikely to succeed at the college level." It is also a safe assumption that if the student is deficient in all three academic areas, his/her potential for success is lessened. When professionals were asked about the three-attempt rule whereby a student has three attempts to pass a given preparatory course, it appeared it have a minimal impact on students and

faculty. Consequently, from the perspective of the reviewer, this is a valid ruling and should be retained.

Learning Disabled and Emotionally Disturbed Students

While reliable numbers and percentages are hard to come by, most institutions overwhelmingly agree that the learning disabled students and those who have emotional problems are appearing in increasing numbers on campuses across the state. This is directly impacting preparatory programs since that is where the majority of these students begin their coursework. Of the 28 community colleges, 18 indicated that they have hired someone with the appropriate expertise to work with these special students. The remainder of the schools have not. The degree to which faculty and staff have had training to work with this population is minimal. This clearly is a problem that needs to be addressed. These students need additional assessment and careful counseling. Faculty and staff need appropriate training to better address the needs of these students. If the community college is the "Open Door" institution and it takes these students in, is it not obligated to serve that student to the fullest extent possible? To do that effectively, however, takes additional dollars. Presently, the SBCC is supporting efforts to secure additional funding to provide disabled students with specialized counseling, placement, evaluation and related services. This report calls for similar support measures for college and vocational preparatory students.

Budgetary Information

Information taken from the 1992-93 Systemwide Summary of the Annual Cost Analysis submitted by all colleges, accumulated and summarized by the Bureau of Financial and Business Services shows that 22 million dollars were spent on instruction for the college preparatory programs. This represents 2.67 percent of total expenditures by the Community College System. Such a relatively small percentage lends legitimacy to those who advocate more funding for preparatory programs especially when it is evident these students need more services and assistance than other students do. Currently lab tutors, directors, and workshops are not funded by the State; only courses are funded and those not fully. The SBCC has proposed an amendment to F.S. 240.359 to increase the instructional support factor of 3/10 percent to 4/10 of direct instructional cost. This increase in the support factor would provide needed resources to address the needs for services and assistance for students in the college preparatory programs. Policy makers need to keep this in mind when budgetary matters are being considered and decided. Consequently, the following recommendation is made:

> **11. Recommend that the legislature endorse the concept of increased support services as cited in recommendations 6 and 7 by raising the support factor from 3/10 percent to 4/10 percent of direct instructional cost.**

Site Visits

While the degree of underpreparedness of students is disarming and deplorable, the research shows unequivocally that developmental programs at the college level do work. That is the good news. Approximations indicate that 50 percent of students who enter preparatory programs drop out. That means for every student who drops out another student is retained. Without doubt, it is the student who is retained who deserves the bulk of the attention. Anyone who has worked with preparatory students can testify to some astounding successes. In our visits around the state, we were fortunate to witness some excellent programs in action. The visits combined with survey responses indicated what programs and practices practitioners found to be both exciting and successful. Some have already been mentioned in other contexts in this report and won't be repeated here. But the following illustrate the excellence of programs and practices that are currently in use at various institutions in the state:

1. Several colleges have developed a College Success Skills course which covers such topics as orientation to college, study skills, career exploration, and self-esteem.

2. One of the college's preparatory algebra program is consolidated into a single five-hour non-credit course. This course, MAT 0024, incorporates the algebra concepts traditionally found in elementary and intermediate algebra. The students attend class every day of the week. Our faculty found that this daily class helps students improve their study skills, retain concepts, and receive instructional support. Our faculty uses innovative techniques such as algebra tiles, counter disks, computer-assisted instruction, cooperative learning and graphing calculators to

assist students in understanding the structure of mathematics and the usefulness of mathematics in solving real world problems. The combination of remedial courses into one course also gives students maximum time to complete mathematics without being adversely impacted by the three-attempt rule.

3. Another college is most excited about its new Applied Math course. The retention in this course seems to be much higher than in traditional college prep. They have yet to determine how successful the students will be in the first level of college mathematics.

4. One community college has piloted and implemented a Bridge Program (in keeping with the school to work concept). It includes applied math, applied English, applied reading, applied physics, and practical reasoning courses. In addition, they have added an Industrial Technology and Business Technology courses. Students are enrolled in these classes simultaneously for a full semester.

5. Another college has an "Early Alert" intervention program through which faculty members can receive support in dealing with college preparatory students' problems. Faculty members can refer students with academic problems, declining attendance patterns, or special needs to an intervention specialist who contacts the student and works with him or her to develop an individualized "prescription" to help solve the problem.

6. One institution designed a structured instructional model consisting of lecture, class, and lab that is very effective. We have developed basic writing skills software. We have developed multi-media presentation materials for basic writing skills. We track our college preparatory students into subsequent college work to demonstrate our effectiveness. We search graduation records to demonstrate our long-term effectiveness--over 33 percent of the graduates started in our program.

7. One college is experimenting with a pilot project in college preparatory algebra which focuses on computer skills assessment and development, and on the development of critical thinking as an integral component of the course. This approach will utilize

> a software program entitled PC Solve and faculty will be specially trained in its use.

These programs speak for themselves and effectively demonstrate the intellectual integrity with which preparatory professionals have approached working with their students. The state can be rightfully proud of their efforts.

Policy Concerns

In the introduction to this report, reference was made to some sticky policy issues such as who should be doing the remediating and what can be done to increase the academic performance of exiting high school seniors thus reducing the numbers of students needing remediation at entry to college. These issues have been receiving much attention both in the media and by educational professionals and researchers. The time has passed for intellectualizing about these issues, and the time for action is at hand. Other states such as Georgia and Oklahoma have instituted programs requiring higher standards for high school students. Georgia has required that all college-bound high school students must take the College Preparatory Curriculum (CPC). Their research indicated that "completing the CPC is strongly related to better preparation for college...[and] is necessary to avoid placement in developmental studies for most students" (Improving Preparation for College, 1991). Oklahoma's State Regents for Higher Education have implemented two initiatives which they believe should reduce the demand for developmental course work. The initiatives are: "(1) a system review of teacher preparation

and recommendations for its enhancement and (2) higher admission standards to enter teacher education programs" (Student Remediation Study, p. 6).

What is alarming about the circumstances in the state of Florida are the large numbers of students requiring remediation and the effect that this has on already strained resources. Certainly, several concrete steps can be taken. First, articulation efforts between community colleges and high schools must be strengthened. Regular communication among secondary and community college administrators, counselors, faculty, and parents is necessary to reinforce understanding of competencies needed at the college level. Community colleges should work, as some already do through letters and brochures, to inform parents as to what courses should be taken in K-12 if their child plans to go to college. This communication with parents and K-12 personnel needs to begin as early as middle school. In addition, all sectors of postsecondary education should keep informed and be supportive of the Postsecondary Accountability Articulation Committee's efforts to effectively implement the educational goals of Blueprint 2000 in K-12. The state's postsecondary educational policy-making bodies have signed an agreement to facilitate the restructuring of K-12. As these changes are implemented, community colleges and state universities need to be partners in the process so that effective transitioning from secondary to postsecondary institutions will remain a foremost priority. Second, the Department of Education and the SBCC should strongly advocate that the new common statewide placement test

establish cut scores that are rigorous and that would more appropriately certify that students who pass them are indeed college-ready. Third, the SBCC should strongly support the recommendations of the Task Force on High School Preparation for Postsecondary Education and Employment which call for increased performance for all high school students. Lastly, all levels of education need to be concerned with teacher education and make available continuous faculty development opportunities to meet the needs of a constantly changing and increasingly complex society. Based on these suggestions, the following recommendations are made:

12. Recommend that articulation efforts between community colleges and secondary schools be strengthened by effective use of current feedback reports; by including administrators, counselors, faculty and parents in the process; and by emphasizing the necessary competencies students will need to be successful in college.

13. Recommend that the State Board of Education strongly endorse the recommendations of the Task Force on High School Preparation for Postsecondary Education and Employment which call for elevated performance levels by high school graduates.

SUMMARY AND CONCLUSION

The purpose of this summative review was to examine the community college preparatory programs statewide from an issue- and policy-oriented perspective. It also sought to capture both qualitative and quantitative aspects of these programs so that determinations could be made about the strengths and/or weaknesses of the programs. Information was gathered through survey questions and in-depth interviews at selected college sites.

Concerns that were evidenced as the review progressed were those that follow. First is the concern about the overwhelming number of students who are entering the community college without the necessary skills to be successful as college students. Roughly, 50 percent of first-time-in-college students need remediation in at least one academic area. The most reliable data that we have at the state level indicates that there is an increase, rather than a lessening, in the numbers of students who need remedial work. If the trend doesn't reverse itself, more and more of the community college resources will need to be used for remedial purposes--a prospect that many educators, legislators, and the general public finds distasteful. Second, the growing demand for preparatory courses and the awareness that returning adult students and some K-12 "late bloomers" will always need these refresher courses tends to reinforce the institutionalization of preparatory programs. A third area of concern is the

growing numbers of non-native speakers of English and students who are learning disabled or emotionally disabled. These students have special needs that go beyond mere academics. These students and the general college preparatory student need more intensive counseling and guidance to make appropriate educational decisions for their lives. Lastly, concerns about faculty development for college/vocational instructors were eminent. There is a need for meaningful faculty development activities to help them understand the nature of this student population and to work more effectively with them.

While there are certainly problems that need to be addressed, there were also many strengths to these programs. Overall, the majority of students who complete preparatory courses are successful. State percentages for 1992-1993 reveal 72-75 percent of students pass reading and writing and just under 60 percent pass mathematics. The rate of success of Florida students compares favorably with national statistics with the exception of mathematics which is somewhat lower than the national rate of 67 percent. In addition, State accountability data indicates that 70.49 percent of students who began in college preparatory courses passed CLAST. The state can be very proud of the dedicated teachers who approach their teaching with zeal and fortitude. They have touched the lives of their students in meaningful ways by working diligently to design course work to meet the needs of their students and, in several cases, by providing an application-based curriculum. Directors and faculty of preparatory programs can be credited with many fine programs

across the state that address the preparatory student in a comprehensive, holistic manner, attentive to more than just academic needs.

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APPENDIXES

240.117 College preparatory instruction in community colleges and state universities.—

(1) On or before June 30, 1984, from tests currently in use in community colleges and universities, the State Board of Education shall specify common placement tests and testing procedures which will assess the basic computation and communication skills of students who intend to enter a degree program at any public community college or state university. Effective July 1, 1985, the state board shall adopt scores below which a student is determined to need additional preparation. The State Board of Education shall adopt rules which enable the community colleges or state universities to implement appropriate modifications of the test instruments or test procedures for exceptional students.

(2)(a) Community college or state university students who have been identified as requiring additional preparation pursuant to subsection (1) shall enroll in college preparatory adult education pursuant to s. 239.301 in community colleges to develop needed college-entry skills. These students shall be permitted to take courses concurrently in other curriculum areas for which they are qualified while enrolled in college preparatory instruction courses. Credit awarded for college preparatory instruction may not be counted towards fulfilling the number of credits required for a degree.

(b) The administrators of a state university may contract with a community college board of trustees for the community college to provide such instruction on the state university campus. Any state university in which the percentage of incoming students requiring college preparatory instruction equals or exceeds the average percentage of such students for the community college system may offer college preparatory instruction without contracting with a community college.

(3) No student shall be enrolled in a college credit mathematics or English course on a dual enrollment basis unless the student has demonstrated adequate precollegiate preparation on the section of the basic computation and communication skills assessment required pursuant to subsection (1) that is appropriate for successful student participation in the course.

History.—s. 24, ch. 83-325; s. 24, ch. 84-336; s. 9, ch. 87-212; s. 26, ch. 89-381; s. 52, ch. 92-136.

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6A-10.0315 College Preparatory Testing, Placement, and Instruction.

(1) When enrollment is for any academic term prior to January 1, 1992, first-time-in-college applicants for admission to community colleges and universities who apply to enter degree programs shall be tested for reading, writing, and mathematics proficiency prior to the completion of registration, using one (1) or more of the tests listed in this subsection, and shall enroll in college preparatory communication and computation instruction if the test scores are lower than those listed below.

(a) ACT Assessment, American College Testing Program.

Reading	14	Composite Standard Score
Writing	14	English Usage Standard Score
Mathematics	13	Mathematics Usage Standard Score

(b) ASSET, American College Testing Program.

Reading	22	Raw Score
Writing	43	Raw Score
Mathematics	12	Elementary Algebra Raw Score

(c) MAPS, College Entrance Examination Board.

Reading	12	Scaled Score
Writing	30	Test of Standard Written English Scaled Score
Mathematics	206	Elementary Algebra Scaled Score

(d) SAT, College Entrance Examination Board.

Reading	340	Verbal Standard Score
Writing	30	Test of Standard Written English Scaled Score
Mathematics	400	Mathematics Standard Score

(2) For admissions after October 1, 1991, for enrollment for the academic term beginning in January 1992 and thereafter, first-time-in-college applicants for admission to community colleges and universities who apply to enter degree programs shall be tested for reading, writing, and mathematics proficiency prior to the completion of registration, using one (1) or more of the tests listed in this subsection, and shall enroll in college preparatory communication and computation instruction if the test scores are lower than those listed below.

(a) ACT Assessment, American College Testing Program.

Composite	14
English	15
Mathematics	13

(b) Enhanced ACT, American College Testing Program.

Reading	16
English	16
Mathematics	16

(c) SAT, The College Board

Verbal	340
TSWE	31
Mathematics	400

(d) MAPS, The College Board

Reading Comprehension	13
TSWE	31
Elementary Algebra	209

(e) New MAPS, The College Board

Reading Comprehension	109
Conventions of Written English	311
Elementary Algebra	613

(f) CPT, Computerized Placement Tests, The College Board

Reading Comprehension	72
Sentence Skills	78
Elementary Algebra	51

(g) ASSET, American College Testing Program

Reading Skills	22
Language Usage	43
Elementary Algebra	12

(h) New ASSET, American College Testing Program

Reading Skills	37
Writing Skills	37
Elementary Algebra	37

(3) Nothing provided in Rule 6A-10.0315(1), FAC., shall be construed to prevent the enrollment of a student in college preparatory instruction if the community college or university determines that such enrollment would enhance the student's opportunity for future academic success. The determination of enrollment would be made after counseling with the student and the analysis and consideration of other assessment techniques and measurements, which may include transcripts, grade evaluations, diagnostic placement or psychological instruments, or other proven indicators or predictors of academic performance.

(4) Students whose first language is not English may be placed in college preparatory instruction prior to the testing required herein, if such instruction is otherwise demonstrated as being necessary. Such students shall not be exempted from the testing required herein.

(5) Test modifications and exemptions in Rule 6A-10.0311(4), FAC., shall apply in the case of applicants with records of physiological disorders.

(6) Institutions affected by this rule shall accept test scores on any one of the tests identified in Rule 6A-10.0315(1), FAC. Individual student scores shall be valid for three (3) years.

(7) During their first term, full-time students who are registered for at least twelve (12) credits, shall begin competency-based preparatory instruction based on the placement test results. Part-time students shall enroll prior to completing twelve (12) credits.

(8) Students shall not enroll for more than three (3) semesters in each skill area to complete college preparatory instruction. Students who withdraw officially before the midpoint of a semester may be considered to have not enrolled that semester for purposes of this limitation. Students who withdraw officially at or after the midpoint of a semester shall be considered to have enrolled that semester unless the withdrawal can be documented as due to reasons of personal hardship or disability, or under major extenuating circumstances. Such exceptions require approval under guidelines established by the boards of trustees or the Board of Regents. Students enrolled in English as a second language may be exempted from this limitation based on a plan submitted by the institution and approved by the Board of Regents or the State Board of Community Colleges for their respective institutions.

(9) Uniform standards for completion of competency-based college preparatory instruction shall correspond to those listed herein for placement in college credit instruction. Once competence has been certified, other public community colleges and universities shall accept the certification upon student transfer. Competence shall be certified upon:

(a) Successful completion of courses in which the competencies specified in Rule 6A-10.033(1)(c)1., FAC., are taught,

(b) Passing a criterion-referenced assessment which tests the competencies specified in Rule 6A-10.033(1)(c)1., FAC., or

(c) Achieving the scores in Rule 6A-10.0315(1), FAC., on the tests listed, or the comparable scores on a validated, analogous norm-referenced test(s).

(10) Students enrolled in college preparatory instruction shall be permitted to take courses concurrently in other curriculum areas for which they are qualified.

(11) The Commissioner shall report to the State Board of Education by November 30 each year the results of the common placement testing.

Specific Authority 229.053(1), 228.072(8)(f) FS. Law Implemented 228.072(8)(f), 240.117 FS. History - New 7-15-84, Amended 6-6-85, Formerly 6A-10.315, Amended 5-17-88, 7-25-91.

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APPENDIX B

PREPARATORY PROGRAM REVIEW
SURVEY INSTRUMENT

INSTITUTION _____

PREPARED BY _____

SunCom No. _____

DIRECTIONS:

This survey instrument should be completed by the director of preparatory instruction at your college. He/she may require some assistance from the institution's reports coordinator and/or the chief academic officer. Return one completed survey to the Division of Community Colleges by AUGUST 20, 1993. If your institution has multiple campuses, responses should be acquired through collaboration.

The term preparatory, as it is used throughout the instrument, includes both college preparatory and vocational preparatory students and/or courses.

Copies of state statutes and rules referred to on the survey are attached at the back of the instrument.

Mail completed survey forms by AUGUST 20, 1993 to:

Dr. Sylvia Fleishman
Division of Community Colleges
1314 Florida Education Center
Tallahassee, FL 32399-0400

Ph. SunCom 278-0555; 904/488-0555; or
FAX SunCom 278-9763; 904/488-9763

SURVEY OF PREPARATORY PROGRAMS

1. What is the mission/purpose of your institution's preparatory program? (Please attach a formal written statement if your institution has one. If your institution has no formal written statement, explain the purpose in your own words.)

_____
_____
_____
_____
_____

2. How are first time in college (FTIC) students placed into preparatory courses at your institution? (Check all that apply.)

_____ By scoring below minimum state passing scores on authorized placement tests as specified in Rule 6A-10.0315 (Copy attached)
_____ By failing to complete appropriate college preparatory courses in high school
_____ By being counseled to enroll by faculty and/or counselors for reasons other than those above
_____ By self-selecting the course
_____ Other (Specify)

_____
_____

3. If your institution has established higher cut scores than the scores designated for the placement examinations in Rule 6A-10.0315, indicate what the higher cut score is for the subject categories listed below.

Test Used	Reading	Writing	Mathematics
ACT	_____	_____	_____
Enhanced ACT	_____	_____	_____
SAT	_____	_____	_____
MAPS	_____	_____	_____
New MAPS	_____	_____	_____
CPT	_____	_____	_____
ASSET	_____	_____	_____
New ASSET	_____	_____	_____

4. How many levels of preparatory courses does your institution offer in each of the following categories?

_____ Reading _____ Writing _____ Mathematics _____ ESL

5. Do the levels of the current preparatory course curriculum adequately meet students' academic needs?

_____ Yes _____ No If no, what would you like to see changed?

_____

_____

_____

_____

6. Does your institution provide remediation in subject matter areas other than mathematics, reading, writing, and English as a Second Language (ESL)?

_____ Yes _____ No If yes, please indicate what other remediation is provided.

_____

_____

7. A. What is the average class size for preparatory classes in following subjects? (Use averages from the 1992-93 reporting year.)

_____ Reading _____ Writing _____ Math _____ ESL

B. If these average class sizes are different from the average sizes of college-level classes in the same area (e.g. college prep English/college-level English; college prep math/college-level math, etc.), do preparatory classes tend to be larger or smaller?

_____ Larger _____ Smaller

8. Are vocational preparatory students and college preparatory students enrolled in the same classes or in separate ones? _____ Same _____Separate _____ N/A

If separate, why?

_____

_____

_____

_____

9. Which of the following best describes the organizational structure of your preparatory program at your institution?

_____ Centralized -- Autonomous department with separate budget and staff

_____ Decentralized -- Combined with English and Mathematics divisions

_____ Other (Specify)

_____

_____

10. A. What are the advantages of the organizational structure under which the preparatory program now operates?

_____
_____
_____
_____

B. What are the disadvantages of the organizational structure under which the preparatory program now operates?

_____
_____
_____
_____

11. What are the underfunded needs that should be addressed at your institution with regard to preparatory education?

_____
_____
_____
_____
_____

12. As a part of the total college organizational culture, how are preparatory programs generally perceived by college faculty and administrators?

_____ As an essential part of fulfilling the college mission
_____ As secondary to mission but necessary for student readiness
_____ As a marginal program somewhat removed from the college mainstream

13. A. Does the person who coordinates your preparatory program have that as her/his primary responsibility? _____ Yes _____ No

B. Does the coordinator/administrator of your preparatory program have any formal training in working with at-risk students? _____ Yes _____ No

14. A. Indicate the percentage of your institution's preparatory instructors who are:

_____ Instructors employed for the specific purpose of teaching "at risk" preparatory students and whose major responsibility is to that targeted student population.
_____ Instructors employed to teach subject area courses, including both preparatory instruction and college-level instruction.

B. Indicate the percentage of your institution's preparatory instructors who are:

_____ Full-time instructors
_____ Part-time instructors

C. What percentage of your preparatory instructors have degrees in the subject matter area which they are teaching? Indicate the percentages associated with the degree types listed below according to the highest in-field degree held.

_____ Bachelors _____ Masters _____ Specialist _____ Doctorate

15. Which of the following best captures how preparatory faculty members are perceived by other educational professionals?

_____ Accepted in the same manner as other full-time college-level instructors
_____ Accepted with reservations
_____ Not accepted

16. How is instruction in preparatory programs most frequently delivered?

_____ Through standardized semester-length courses and standardized classes
_____ Through standardized semester-length courses augmented by lab support
_____ Through flexible, self-paced, competency-based learning labs
_____ Through individualized instruction from qualified tutors
_____ Through time intensive specially structured classes and labs (e.g. classes and labs that meet five times per week, 6-8 week intensive review classes, etc.)

17. To what extent does your institution rely on academic support labs for upgrading the skills of preparatory students?

_____ No labs are available for preparatory students.
_____ The preparatory student's entire program of upgrading skills is conducted through the lab.
_____ In addition to attending preparatory classes, preparatory students are required to spend a certain number of hours in the lab
_____ Preparatory students are encouraged but not required to attend the lab for additional help.
_____ Preparatory students attend the lab of their own volition.
_____ Other (Specify)

_____

_____

18. What instructional methods appear to be most successful with "at risk" students enrolled in preparatory courses? Direct discussion toward any <u>one of or all three</u> subject areas of mathematics, reading, and writing.

_____
_____
_____
_____
_____

19. Indicate how frequently preparatory instructors make use of the following kinds of technology in the teaching/learning process.

A. <u>Computers</u>
_____ Almost always
_____ Often
_____ Occasionally
_____ Almost never

B. <u>Reading Equipment</u>
_____ Almost always
_____ Often
_____ Occasionally
_____ Never

C. <u>Graphing Calculators</u>
_____ Almost always
_____ Often
_____ Occasionally
_____ Almost never

D. <u>Other Equipment</u>
_____ Almost always
_____ Often
_____ Occasionally
_____ Almost never

20. What would help to improve accessibility and/or the use of computers and related technology for both students and faculty?

_____
_____
_____
_____
_____
_____

21. How would you describe the extent to which your students in preparatory programs have access to support services (i.e. counseling, career planning, etc.) at your college? Would you say they have:

_____ Unlimited opportunities
_____ Limited opportunities
_____ Little or no opportunities

22. To what extent do preparatory students take advantage of support services that are available to them?

_____ Often _____ Sometimes _____ Seldom _____ Never

23. What types of support services not currently available should be made available to preparatory students?

_____
_____
_____
_____
_____

24. Does your institution keep retention records on students enrolled in preparatory courses? _____ Yes _____ No

25. Are any attempts made to follow up on students who drop out of preparatory programs?
_____ Yes _____ No If yes, what do the follow up studies reveal?

_____
_____
_____
_____
_____

26. Does your institution conduct follow-up studies to track student progress after they complete preparatory instruction? _____ Yes _____ No If yes, please enclose current findings.

27. A. Estimate the percentage of preparatory students who are able to exit preparatory instruction after completing one course. _____ %

B. Rule 6A-10.0315 states that preparatory students "shall not enroll for more than three semesters in each skill area to complete college preparatory instruction." Estimate the percentage of your preparatory student enrollment that has been adversely affected by this rule. _____ %

28. What exit criteria are used by your institution to indicate that preparatory students have mastered the essential competencies to move into college-level coursework? (Check all that apply.)

_____ Passing grades ("C" or better) in preparatory courses
_____ Re-take and pass the entry level placement test
_____ Take and pass a norm-referenced test
_____ Take and pass a special exit (post-test) examination developed by the institution
_____ Other (Specify)

_____
_____

29. A. Are current placement tests/procedures adequate measures for your ESL population? _____ Yes _____ No If no, what, in your opinion, would be needed to assess ESL students more accurately on entry?

_____

_____

_____

_____

_____

_____

B. Are there any issues pertaining to courses, curriculum, and/or instruction of ESL students that need to be addressed at your institution and/or at the state level? Discuss.

_____

_____

_____

_____

_____

_____

30. A. What percentage of your preparatory student population would you estimate could be classified as persons with (a) learning disabilities? _____ % (b) emotional disabilities? _____%

B. Are the numbers of persons with learning or emotional disabilities increasing at your institution? _____ Yes _____ No

C. Has your institution hired one or more people who are trained specifically to work with this population? _____ Yes _____ No

D. To what extent has your administration, faculty, and staff had any training to understand or work with this student population?
_____ Often _____ Sometimes _____ Seldom _____ Never

31. Does your college preparatory/vocational preparatory program have any articulation interaction with your local high schools? _____ Yes _____ No If yes, describe.

_____

_____

_____

_____

_____

_____

_____

32. Describe the articulation interaction between your college preparatory/vocational preparatory courses and the college-level courses.

33. What are the most pressing issues or problems that need to be addressed with regard to preparatory programs?

34. What have you done recently that is exciting in your preparatory programs? In other words, share what "works" with these students and relate your successes. If your institution has what might be considered an exemplary program, please describe it or attach information that would illustrate it.

35. Who, in your opinion, should bear the major responsibility for the instruction of preparatory students?

_____ Adult Education
_____ Community Colleges
_____ High Schools

Explain why.

36. What steps or actions, in your professional judgment, should be taken by students, faculty, and administrators to enable students to enter college with fewer academic deficiencies?

_____
_____
_____
_____
_____

Mail responses to:

Dr. Sylvia S. Fleishman
Division of Community Colleges
1314 Florida Education Center
Tallahassee, FL 32399

Ph: SunCom 278-0555
904-488-0555
FAX - SunCom 278-9763
904-488-9763

APPENDIX C

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APPENDIX D

ACCOUNTABILITY MEASURE 4 (PART 1)

COLLEGE PREPARATORY SUCCESS

The measure will show the number and percent of students who tested into and enrolled in college preparatory courses, who have successfully completed the program after two years.

Performance Goal: To have at least 60% of all students who test into college preparatory programs successfully complete the program within two years.

Performance Benchmark: To increase the percentage of students successfully completing college preparatory programs by 2 percentage points a year until the 60% goal is achieved or exceeded.

College Prep Reading			College Prep Writing			College Prep Math		
Enrolled	Passed	%	Enrolled	Passed	%	Enrolled	Passed	%
5,455	3,670	67.28	6,721	4,624	68.8	9,892	5,160	52.16

(Taken from 1993 Interim Accountability Report. Florida Community College System)

APPENDIX D

ACCOUNTABILITY OUTCOME MEASURE 5

CLAST PERFORMANCE

This measure will show the number and percent of students who have completed 60 or more college credit hours at a specific institution, excluding college prep courses, and have met the CLAST standards.

Performance Goal: To have at least 90% of the students who have completed 60 credit hours meet the CLAST standards.

Performance Benchmark: To increase the percentage of students who achieve the college-level skills measure by CLAST by 2 percentage points a year until the statewide goal is achieved.

All CLAST Subtests

	Number Tested	Percent Passed
College Prep *	9,495	70.49
No College Prep	33,022	87.57
Total	45,517	83.75

*These are the students who were referred to college preparatory instruction, who subsequently completed the program and went on to earn 60 credit hours and sit for the CLAST.

(Taken from 1993 Interim Accountability Report. Florida Community College System)

APPENDIX E

FLORIDA COMMUNITY COLLEGE SYSTEM
College Preparatory Course Information
1992-93 REPORTING YEAR
PERCENTAGES FOR SYSTEM

CATEGORY	UNDUP HEAD COUNT	%	MATH						READING						WRITING					
			PASSED	%	FAILED	%	OTHER	%	PASSED	%	FAILED	%	OTHER	%	PASSED	%	FAILED	%	OTHER	%
ASIAN FEMALES	1,441	1%	556	1%	63	0%	177	1%	629	3%	47	2%	77	2%	935	3%	73	1%	143	2%
ASIAN MALES	1,263	1%	408	1%	57	0%	144	1%	597	3%	60	2%	89	2%	848	2%	122	2%	191	2%
ASIAN TOTAL	2,704	3%	964	2%	120	1%	321	1%	1,226	6%	107	4%	166	4%	1,783	5%	195	4%	334	4%
BLACK FEMALES	12,477	12%	6,414	11%	2,028	15%	3,383	13%	4,629	22%	595	22%	854	20%	4,887	14%	719	14%	1,094	13%
BLACK MALES	6,830	7%	2,995	5%	1,358	10%	1,749	7%	2,269	11%	402	15%	622	14%	2,901	8%	608	12%	873	10%
BLACK UNKNOWN	2	0%	6	0%	0	0%	0	0%	4	0%	0	0%	0	0%	4	0%	0	0%	2	0%
BLACK TOTAL	19,309	19%	9,415	16%	3,386	25%	5,132	19%	6,902	33%	997	37%	1,476	34%	7,772	22%	1,327	26%	1,969	24%
HISPANIC FEMALES	10,510	10%	4,905	8%	1,020	8%	2,144	8%	3,213	15%	293	11%	520	12%	7,448	21%	686	14%	1,327	16%
HISPANIC MALES	8,074	8%	3,339	6%	1,078	8%	1,646	6%	2,131	10%	336	13%	509	12%	5,007	14%	713	14%	1,197	14%
HISPANIC	18,584	18%	8,244	14%	2,098	15%	3,790	14%	5,344	25%	629	24%	1,029	24%	12,456	35%	1,399	28%	2,524	30%
INDIAN FEMALES	327	0%	191	0%	35	0%	98	0%	73	0%	3	0%	16	0%	66	0%	9	0%	19	0%
INDIAN MALES	233	0%	107	0%	30	0%	87	0%	36	0%	4	0%	13	0%	72	0%	10	0%	22	0%
INDIAN TOTALS	560	1%	298	1%	65	0%	185	1%	109	1%	7	0%	29	1%	138	0%	19	0%	41	0%
WHITE FEMALES	36,092	35%	25,285	43%	4,077	30%	9,823	37%	4,887	22%	435	16%	836	19%	7,030	20%	778	15%	1,466	18%
WHITE MALES	24,538	24%	13,886	24%	3,830	28%	7,251	27%	3,018	14%	485	18%	755	18%	6,222	18%	1,322	26%	2,010	24%
WHITE UNKNOWN	4	0%	2	0%	0	0%	1	0%	2	0%	0	0%	0	0%	2	0%	0	0%	0	0%
WHITE TOTAL	60,634	60%	39,173	67%	7,907	58%	17,075	64%	7,874	36%	920	35%	1,591	37%	13,254	37%	2,100	42%	3,476	42%
UNKNOWN RACE FEMALE	47	0%	24	0%	9	0%	13	0%	13	0%	1	0%	2	0%	15	0%	2	0%	2	0%
UNKNOWN RACE MALES	41	0%	12	0%	7	0%	7	0%	5	0%	0	0%	3	0%	16	0%	3	0%	15	0%
UNKNOWN RACE/GENDER	5	0%	6	0%	1	0%	0	0%	0	0%	0	0%	0	0%	6	0%	0	0%	0	0%
UNKNOWN RACE	93	0%	42	0%	17	0%	20	0%	18	0%	1	0%	5	0%	37	0%	5	0%	17	0%
SYSTEM TOTAL	101,884	100%	58,136	100%	13,593	100%	26,523	100%	21,173	100%	2,661	100%	4,296	100%	35,439	100%	5,045	100%	8,361	100%

** SOURCE: 1992-93 STUDENT DATA BASE (Summer, Fall, Winter/Spring End-of-Term)

April 6, 1994 MBW C:\LOTUS\9293PREP.WK3

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APPENDIX E

FLORIDA COMMUNITY COLLEGE SYSTEM
College Preparatory Course Information
1992-93 REPORTING YEAR
PERCENTAGES FOR GENDER TYPE WITHIN RACE CATEGORY

	UNDUP HEAD		MATH						READING						WRITING					
CATEGORY	COUNT	%	PASSED	%	FAILED	%	OTHER	%	PASSED	%	FAILED	%	OTHER	%	PASSED	%	FAILED	%	OTHER	%
ASIAN FEMALES	1,441	53%	556	58%	63	53%	177	55%	629	51%	47	44%	77	46%	935	52%	73	37%	143	43%
ASIAN MALES	1,263	47%	408	42%	57	48%	144	45%	597	49%	60	56%	89	54%	848	48%	122	63%	191	57%
ASIAN TOTAL	2,704	100%	964	100%	120	100%	321	100%	1,226	100%	107	100%	166	100%	1,783	100%	195	100%	334	100%
BLACK FEMALES	12,477	65%	6,414	68%	2,028	60%	3,383	66%	4,629	67%	595	60%	854	58%	4,867	63%	719	54%	1,094	56%
BLACK MALES	6,830	35%	2,995	32%	1,358	40%	1,749	34%	2,269	33%	402	40%	622	42%	2,901	37%	608	46%	873	44%
BLACK UNKNOWN	2	0%	6	0%	0	0%	0	0%	4	0%	0	0%	0	0%	4	0%	0	0%	2	0%
BLACK TOTAL	19,309	100%	9,415	100%	3,386	100%	5,132	100%	6,902	100%	997	100%	1,476	100%	7,772	100%	1,327	100%	1,969	100%
HISPANIC FEMALES	10,510	57%	4,905	59%	1,020	49%	2,144	57%	3,213	60%	293	47%	520	51%	7,448	60%	686	49%	1,327	53%
HISPANIC MALES	8,074	43%	3,339	41%	1,078	51%	1,646	43%	2,131	40%	336	53%	509	49%	5,007	40%	713	51%	1,197	47%
HISPANIC	18,584	100%	8,244	100%	2,098	100%	3,790	100%	5,344	100%	629	100%	1,029	100%	12,455	100%	1,399	100%	2,524	100%
INDIAN FEMALES	327	58%	191	64%	35	54%	98	53%	73	67%	3	43%	16	55%	66	48%	9	47%	19	46%
INDIAN MALES	233	42%	107	36%	30	46%	87	47%	36	33%	4	57%	13	45%	72	52%	10	53%	22	54%
INDIAN TOTALS	560	100%	298	100%	65	100%	185	100%	109	100%	7	100%	29	100%	138	100%	19	100%	41	100%
WHITE FEMALES	36,092	60%	25,285	65%	4,077	52%	9,823	58%	4,557	60%	435	47%	836	53%	7,030	53%	778	37%	1,466	42%
WHITE MALES	24,538	40%	13,886	35%	3,830	48%	7,251	42%	3,015	40%	485	53%	755	47%	6,222	47%	1,322	63%	2,010	58%
WHITE UNKNOWN	4	0%	2	0%	0	0%	1	0%	2	0%	0	0%	0	0%	2	0%	0	0%	0	0%
WHITE TOTAL	60,634	100%	39,173	100%	7,907	100%	17,075	100%	7,574	100%	920	100%	1,591	100%	13,254	100%	2,100	100%	3,476	100%
UNKNOWN RACE FEMALE	47	51%	24	57%	9	53%	13	65%	13	72%	1	100%	2	40%	15	41%	2	40%	2	12%
UNKNOWN RACE MALES	41	44%	12	29%	7	41%	7	35%	5	28%	0	0%	3	60%	16	43%	3	60%	15	88%
UNKNOWN RACE/GENDER	5	5%	6	14%	1	6%	0	0%	0	0%	0	0%	0	0%	6	16%	0	0%	0	0%
UNKNOWN RACE	93	100%	42	100%	17	100%	20	100%	18	100%	1	100%	5	100%	37	100%	5	100%	17	100%
SYSTEM TOTAL	101,884	100%	58,136	100%	13,593	100%	26,523	100%	21,173	100%	2,661	100%	4,296	100%	35,439	100%	5,045	100%	8,361	100%

** SOURCE: 1992-93 STUDENT DATA BASE (Summer, Fall, Winter/Spring End-of-Term)

April 7, 1994 MBW C:\LOTUS\9293PRP2.WK3

APPENDIX E

FLORIDA COMMUNITY COLLEGE SYSTEM
College Preparatory Course Information
1991-92 REPORTING YEAR
PERCENTAGES FOR SYSTEM

	UNDUP HEAD		MATH						READING						WRITING					
CATEGORY	COUNT	%	PASSED	%	FAILED	%	OTHER	%	PASSED	%	FAILED	%	OTHER	%	PASSED	%	FAILED	%	OTHER	%
ASIAN FEMALES	1,238	1%	472	1%	47	0%	180	1%	609	3%	33	2%	102	3%	752	2%	74	2%	113	1%
ASIAN MALES	1,157	1%	308	1%	70	1%	136	1%	489	2%	61	3%	89	2%	749	2%	139	3%	185	2%
ASIAN TOTAL	2,395	2%	780	1%	117	1%	316	1%	1,098	5%	94	4%	191	5%	1,501	4%	213	4%	298	4%
BLACK FEMALES	11,271	12%	5,673	11%	1,654	13%	2,984	12%	4,102	20%	398	19%	770	19%	4,474	13%	612	13%	973	13%
BLACK MALES	5,988	6%	2,575	5%	1,030	8%	1,563	6%	2,067	10%	290	14%	463	11%	2,708	8%	499	11%	686	9%
BLACK UNKNOWN	1	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	0%	0	0%	0	0%
BLACK TOTAL	17,260	18%	8,248	15%	2,684	22%	4,547	18%	6,169	30%	688	32%	1,233	30%	7,184	21%	1,111	23%	1,659	21%
HISPANIC FEMALES	10,027	10%	4,653	9%	899	7%	1,942	8%	2,885	14%	247	12%	439	11%	7,226	21%	759	16%	1,170	15%
HISPANIC MALES	7,690	8%	3,123	6%	935	8%	1,588	6%	2,133	11%	259	12%	431	11%	4,896	14%	673	14%	1,144	15%
HISPANIC UNKNOWN	1	0%	0	0%	0	0%	0	0%	2	0%	0	0%	0	0%	2	0%	0	0%	0	0%
HISPANIC	17,718	18%	7,776	15%	1,834	15%	3,530	14%	5,020	25%	506	24%	870	21%	12,124	35%	1,432	30%	2,314	30%
INDIAN FEMALES	288	0%	155	0%	28	0%	90	0%	49	0%	4	0%	15	0%	59	0%	11	0%	20	0%
INDIAN MALES	216	0%	104	0%	23	0%	70	0%	33	0%	2	0%	14	0%	67	0%	5	0%	25	0%
INDIAN TOTALS	504	1%	259	0%	51	0%	160	1%	82	0%	6	0%	29	1%	126	0%	16	0%	45	1%
WHITE FEMALES	35,289	36%	23,798	44%	3,880	32%	9,563	38%	4,658	23%	387	18%	883	22%	6,949	20%	736	16%	1,405	18%
WHITE MALES	23,939	25%	12,629	24%	3,709	30%	7,101	28%	3,173	16%	449	21%	832	21%	6,527	19%	1,216	26%	1,990	26%
WHITE UNKNOWN	3	0%	2	0%	1	0%	2	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
WHITE TOTAL	59,231	61%	36,429	68%	7,590	62%	16,666	66%	7,831	39%	836	39%	1,715	42%	13,476	39%	1,952	41%	3,395	44%
UNKNOWN RACE FEMALE	65	0%	30	0%	4	0%	14	0%	13	0%	1	0%	3	0%	24	0%	2	0%	7	0%
UNKNOWN RACE MALES	83	0%	32	0%	6	0%	15	0%	18	0%	0	0%	9	0%	30	0%	18	0%	7	0%
UNKNOWN RACE/GENDER	5	0%	3	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	0%	0	0%	1	0%
UNKNOWN RACE	153	0%	65	0%	10	0%	29	0%	31	0%	1	0%	12	0%	56	0%	20	0%	15	0%
SYSTEM TOTAL	97,261	100%	53,557	100%	12,286	100%	25,248	100%	20,231	100%	2,131	100%	4,050	100%	34,467	100%	4,744	100%	7,726	100%

** SOURCE: 1991-92 STUDENT DATA BASE (Summer, Fall, Winter/Spring End-of-Term)

April 7, 1994 MBW C:\LOTUS\9192PREP.WK3

APPENDIX E

FLORIDA COMMUNITY COLLEGE SYSTEM
College Preparatory Course Information
1991-92 REPORTING YEAR
PERCENTAGES FOR GENDER TYPE WITHIN RACE CATEGORY

	UNDUP HEAD		MATH						READING						WRITING					
CATEGORY	COUNT	%	PASSED	%	FAILED	%	OTHER	%	PASSED	%	FAILED	%	OTHER	%	PASSED	%	FAILED	%	OTHER	%
ASIAN FEMALES	1,238	52%	472	61%	47	40%	180	57%	609	55%	33	35%	102	53%	752	50%	74	35%	113	38%
ASIAN MALES	1,157	48%	308	39%	70	60%	136	43%	489	45%	61	65%	89	47%	749	50%	139	65%	185	62%
ASIAN TOTAL	2,395	100%	780	100%	117	100%	316	100%	1,098	100%	94	100%	191	100%	1,501	100%	213	100%	298	100%
BLACK FEMALES	11,271	65%	5,673	69%	1,654	62%	2,984	66%	4,102	66%	398	58%	770	62%	4,474	62%	612	55%	973	59%
BLACK MALES	5,988	35%	2,575	31%	1,030	38%	1,563	34%	2,067	34%	290	42%	463	38%	2,708	38%	499	45%	686	41%
BLACK UNKNOWN	1	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	0%	0	0%	0	0%
BLACK TOTAL	17,260	100%	8,248	100%	2,684	100%	4,547	100%	6,169	100%	688	100%	1,233	100%	7,184	100%	1,111	100%	1,659	100%
HISPANIC FEMALES	10,027	57%	4,653	60%	899	49%	1,942	55%	2,885	57%	247	49%	439	50%	7,226	60%	759	53%	1,170	51%
HISPANIC MALES	7,690	43%	3,123	40%	935	51%	1,588	45%	2,133	42%	259	51%	431	50%	4,896	40%	673	47%	1,144	49%
HISPANIC UNKNOWN	1	0%	0	0%	0	0%	0	0%	2	0%	0	0%	0	0%	2	0%	0	0%	0	0%
HISPANIC	17,718	100%	7,776	100%	1,834	100%	3,530	100%	5,020	100%	506	100%	870	100%	12,124	100%	1,432	100%	2,314	100%
INDIAN FEMALES	288	57%	155	60%	28	55%	90	56%	49	60%	4	67%	15	52%	59	47%	11	69%	20	44%
INDIAN MALES	216	43%	104	40%	23	45%	70	44%	33	40%	2	33%	14	48%	67	53%	5	31%	25	56%
INDIAN TOTALS	504	100%	259	100%	51	100%	160	100%	82	100%	6	100%	29	100%	126	100%	16	100%	45	100%
WHITE FEMALES	35,289	60%	23,798	65%	3,880	51%	9,563	57%	4,658	59%	387	46%	883	51%	6,949	52%	736	38%	1,405	41%
WHITE MALES	23,939	40%	12,629	35%	3,709	49%	7,101	43%	3,173	41%	449	54%	832	49%	6,527	48%	1,216	62%	1,990	59%
WHITE UNKNOWN	3	0%	2	0%	1	0%	2	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
WHITE TOTAL	59,231	100%	36,429	100%	7,590	100%	16,666	100%	7,831	100%	836	100%	1,715	100%	13,476	100%	1,952	100%	3,395	100%
UNKNOWN RACE FEMALE	65	42%	30	46%	4	40%	14	48%	13	42%	1	100%	3	25%	24	43%	2	10%	7	47%
UNKNOWN RACE MALES	83	54%	32	49%	6	60%	15	52%	18	58%	0	0%	9	75%	30	54%	18	90%	7	47%
UNKNOWN RACE/GENDER	5	3%	3	5%	0	0%	0	0%	0	0%	0	0%	0	0%	2	4%	0	0%	1	7%
UNKNOWN RACE	153	100%	65	100%	10	100%	29	100%	31	100%	1	100%	12	100%	56	100%	20	100%	15	100%
SYSTEM TOTAL	97,261	100%	53,557	100%	12,286	100%	25,248	100%	20,231	100%	2,131	100%	4,050	100%	34,467	100%	4,744	100%	7,726	100%

** SOURCE: 1991-92 STUDENT DATA BASE (Summer, Fall, Winter/Spring End-of-Term)

April 8, 1994 MBW C:\LOTUS\9293PRP2.WK3

APPENDIX F

FLORIDA COMMUNITY COLLEGE SYSTEM
COLLEGE PREPARATORY COURSES
AGE, RACE AND GENDER DISTRIBUTIONS

SYSTEM TOTALS

	ASIAN				BLACK					HISPANIC				INDIAN				WHITE
	F	M	TOTAL		F	M	X	TOTAL		F	M	TOTAL		F	M	TOTAL		F
	CNT	CNT	CNT	%	CNT	CNT	CNT	CNT	%	CNT	CNT	CNT	%	CNT	CNT	CNT	%	CNT
AGE																		
< 16	2	5	7	7.07	7	7	0	14	14.14	10	3	13	13.13	0	0	0	0	34
16-20	539	563	1,102	2.76	5,131	3,104	0	8,235	20.65	4,512	3,768	8,280	20.77	98	81	179	0.45	12,035
21-25	364	393	757	3.19	2,732	1,793	0	4,525	19.06	2,199	2,105	4,304	18.13	69	63	132	0.56	7,398
26-30	199	123	322	2.32	1,691	846	1	2,538	18.25	1,371	998	2,369	17.04	51	33	84	0.60	5,386
31-35	146	83	229	2.29	1,229	473	1	1,703	17.04	988	531	1,519	15.20	44	24	68	0.68	4,441
36-40	100	38	138	2.05	905	302	0	1,207	17.90	652	291	943	13.99	26	14	40	0.59	3,117
41-45	58	25	83	2.04	489	176	0	665	16.33	392	176	568	13.95	18	11	29	0.71	1,958
46-50	20	19	39	2.00	167	57	0	224	11.49	206	100	306	15.69	15	5	20	1.03	1,026
51-55	8	7	15	1.86	57	27	0	84	10.43	95	45	140	17.39	6	3	9	1.12	419
56-60	3	2	5	1.98	18	5	0	23	9.09	40	14	54	21.34	0	0	0	0	125
61-65	2	1	3	2.33	11	4	0	15	11.63	21	17	38	29.46	0	0	0	0	45
> 65	0	1	1	0.56	15	12	0	27	15.00	19	17	36	20.00	0	0	0	0	69
UNKN	2	1	3	2.05	28	21	0	49	33.56	7	8	15	10.27	0	0	0	0	36
TOTAL	1,443	1,261	2,704	2.65	12,480	6,827	2	19,309	18.95	10,512	8,073	18,585	18.24	327	234	561	0.55	36,089

(CONTINUED)

SOURCE: 1992-93 STUDENT DATA BASE

APPENDIX F

FLORIDA COMMUNITY COLLEGE SYSTEM
COLLEGE PREPARATORY COURSES
AGE, RACE AND GENDER DISTRIBUTIONS

SYSTEM TOTALS

	WHITE				UNKNOWN					
	M	X	TOTAL		F	M	X	TOTAL		TOTAL
	CNT	CNT	CNT	%	CNT	CNT	CNT	CNT	%	CNT
AGE										
< 16	31	0	65	65.66	0	0	0	0	0	99
16-20	10,012	1	22,048	55.30	12	14	0	26	0.07	39,870
21-25	6,592	1	13,991	58.94	17	13	0	30	0.13	23,739
26-30	3,192	0	8,578	61.69	6	7	0	13	0.09	13,904
31-35	2,028	0	6,469	64.73	2	4	0	6	0.06	9,994
36-40	1,295	0	4,412	65.44	2	0	0	2	0.03	6,742
41-45	763	0	2,721	66.81	5	2	0	7	0.17	4,073
46-50	333	0	1,359	69.69	2	0	0	2	0.10	1,950
51-55	137	0	556	69.07	1	0	0	1	0.12	805
56-60	46	0	171	67.59	0	0	0	0	0	253
61-65	28	0	73	56.59	0	0	0	0	0	129
> 65	47	0	116	64.44	0	0	0	0	0	180
UNKN	36	1	73	50.00	0	2	4	6	4.11	146
TOTAL	24,540	3	60,632	59.51	47	42	4	93	0.09	101884

SOURCE: 1992-93 STUDENT DATA BASE

APPENDIX F

FLORIDA COMMUNITY COLLEGE SYSTEM
COLLEGE PREPARATORY COURSES
AGE, RACE AND GENDER DISTRIBUTIONS

SYSTEM TOTALS

	ASIAN				BLACK				HISPANIC				INDIAN				WHITE	
	F	M	TOTAL		F	M	TOTAL		F	M	TOTAL		F	M	TOTAL		F	M
	CNT	CNT	CNT	%	CNT	CNT	CNT	%	CNT	CNT	CNT	%	CNT	CNT	CNT	%	CNT	CNT
AGE																		
< 16	1	3	4	4.21	8	8	16	16.84	5	10	15	15.79	0	0	0	0	31	29
16-20	496	499	995	2.54	4,786	2,951	7,737	19.72	4,106	3,581	7,687	19.59	110	82	192	0.49	12,231	10,330
21-25	314	379	693	3.14	2,310	1,485	3,795	17.17	2,176	1,947	4,123	18.65	62	59	121	0.55	7,035	6,291
26-30	158	139	297	2.19	1,521	647	2,168	16.02	1,419	1,014	2,433	17.98	45	34	79	0.58	5,380	3,161
31-35	108	52	160	1.73	1,116	437	1,553	16.82	939	530	1,469	15.91	30	13	43	0.47	4,219	1,779
36-40	76	30	106	1.80	736	221	957	16.23	591	268	859	14.57	11	11	22	0.37	2,832	1,112
41-45	56	27	83	2.29	386	139	525	14.47	381	165	546	15.05	20	7	27	0.74	1,814	629
46-50	14	12	26	1.43	179	41	220	12.12	204	77	281	15.48	6	5	11	0.61	952	321
51-55	8	9	17	2.21	78	14	92	11.98	97	37	134	17.45	3	1	4	0.52	414	105
56-60	3	2	5	1.72	27	8	35	12.03	50	16	66	22.68	0	1	1	0.34	134	50
61-65	1	1	2	1.68	7	4	11	9.24	24	19	43	36.13	0	0	0	0	42	21
> 65	0	1	1	0.68	6	4	10	6.80	19	10	29	19.73	0	1	1	0.68	61	44
UNKN	3	3	6	1.49	111	31	142	35.15	18	17	35	8.66	1	2	3	0.74	144	68
TOTAL	1,238	1,157	2,395	2.46	11,271	5,990	17,261	17.75	10,029	7,691	17,720	18.22	288	216	504	0.52	35,289	23,940

(CONTINUED)

SOURCE: 1991-92 STUDENT DATA BASE

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APPENDIX F

FLORIDA COMMUNITY COLLEGE SYSTEM
COLLEGE PREPARATORY COURSES
AGE, RACE AND GENDER DISTRIBUTIONS

SYSTEM TOTALS

	WHITE			UNKNOWN					TOTAL
	X	TOTAL		F	M	X	TOTAL		
	CNT	CNT	%	CNT	CNT	CNT	CNT	%	CNT
AGE									
< 16	0	60	63.16	0	0	0	0	0	95
16-20	1	22,562	57.51	23	35	0	58	0.15	39,231
21-25	1	13,327	60.29	13	32	0	45	0.20	22,104
26-30	1	8,542	63.12	9	5	0	14	0.10	13,533
31-35	0	5,998	64.98	7	1	0	8	0.09	9,231
36-40	0	3,944	66.90	4	3	0	7	0.12	5,895
41-45	0	2,443	67.34	1	3	0	4	0.11	3,628
46-50	0	1,273	70.14	2	2	0	4	0.22	1,815
51-55	0	519	67.58	2	0	0	2	0.26	768
56-60	0	184	63.23	0	0	0	0	0	291
61-65	0	63	52.94	0	0	0	0	0	119
> 65	0	105	71.43	1	0	0	1	0.68	147
UNKN	0	212	52.48	1	0	5	6	1.49	404
TOTAL	3	59,232	60.90	63	81	5	149	0.15	97,261

SOURCE: 1991-92 STUDENT DATA BASE

APPENDIX F

FLORIDA COMMUNITY COLLEGE SYSTEM
VOCATIONAL PREPARATORY COURSES
AGE, RACE AND GENDER DISTRIBUTIONS

SYSTEM TOTALS

	ASIAN				BLACK				HISPANIC				INDIAN				WHITE	
	F	M	TOTAL		F	M	TOTAL		F	M	TOTAL		F	M	TOTAL		F	M
	CNT	CNT	CNT	%	CNT	CNT	CNT	%	CNT	CNT	CNT	%	CNT	CNT	CNT	%	CNT	CNT
AGE																		
< 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2
16-20	5	1	6	2.70	38	21	59	26.58	5	5	10	4.50	0	1	1	0.45	69	77
21-25	1	6	7	2.11	62	63	125	37.76	12	20	32	9.67	1	1	2	0.60	95	68
26-30	2	2	4	1.37	56	45	101	34.47	9	27	36	12.29	0	0	0	0	96	56
31-35	1	3	4	1.29	51	47	98	31.72	9	35	44	14.24	0	0	0	0	98	65
36-40	8	2	10	3.85	41	34	75	28.85	8	23	31	11.92	0	1	1	0.38	93	49
41-45	2	1	3	2.00	13	15	28	18.67	10	21	31	20.67	1	0	1	0.67	44	43
46-50	1	2	3	2.78	15	8	23	21.30	4	18	22	20.37	1	0	1	0.93	32	26
51-55	0	1	1	1.47	6	7	13	19.12	6	15	21	30.88	0	1	1	1.47	19	13
56-60	0	1	1	3.13	4	6	10	31.25	2	6	8	25.00	0	0	0	0	8	5
61-65	0	0	0	0	1	1	2	20.00	0	4	4	40.00	0	0	0	0	2	2
> 65	0	0	0	0	0	1	1	25.00	0	0	0	0	0	0	0	0	2	1
UNKN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
TOTAL	20	19	39	2.17	287	248	535	29.81	65	174	239	13.31	3	4	7	0.39	563	408

(CONTINUED)

SOURCE: 1992-93 STUDENT DATA BASE

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APPENDIX F

FLORIDA COMMUNITY COLLEGE SYSTEM
VOCATIONAL PREPARATORY COURSES
AGE, RACE AND GENDER DISTRIBUTIONS

SYSTEM TOTALS

	WHITE		UNKNOWN				
	TOTAL		F	M	TOTAL		TOTAL
	CNT	%	CNT	CNT	CNT	%	CNT
AGE							
< 16	6	100.0	0	0	0	0	6
16-20	146	65.77	0	0	0	0	222
21-25	163	49.24	1	1	2	0.60	331
26-30	152	51.88	0	0	0	0	293
31-35	163	52.75	0	0	0	0	309
36-40	142	54.62	1	0	1	0.38	260
41-45	87	58.00	0	0	0	0	150
46-50	58	53.70	1	0	1	0.93	108
51-55	32	47.06	0	0	0	0	68
56-60	13	40.63	0	0	0	0	32
61-65	4	40.00	0	0	0	0	10
> 65	3	75.00	0	0	0	0	4
UNKN	2	100.0	0	0	0	0	2
TOTAL	971	54.09	3	1	4	0.22	1,795

SOURCE: 1992-93 STUDENT DATA BASE

APPENDIX F

FLORIDA COMMUNITY COLLEGE SYSTEM
VOCATIONAL PREPARATORY COURSES
AGE, RACE AND GENDER DISTRIBUTIONS

SYSTEM TOTALS

	ASIAN				BLACK				HISPANIC				INDIAN				WHITE	
	F	M	TOTAL		F	M	TOTAL		F	M	TOTAL		F	M	TOTAL		F	M
	CNT	CNT	CNT	%	CNT	CNT	CNT	%	CNT	CNT	CNT	%	CNT	CNT	CNT	%	CNT	CNT
AGE																		
< 16	0	1	1	1.82	5	14	19	34.55	1	2	3	5.45	0	0	0	0	13	19
16-20	3	5	8	2.49	65	42	107	33.33	4	13	17	5.30	1	2	3	0.93	95	90
21-25	3	5	8	1.75	130	116	246	53.71	19	39	58	12.66	0	1	1	0.22	67	69
26-30	9	2	11	2.36	127	100	227	48.71	15	58	73	15.67	1	3	4	0.86	81	69
31-35	1	4	5	1.49	70	58	128	38.21	16	38	54	16.12	0	2	2	0.60	91	53
36-40	8	3	11	3.93	49	39	88	31.43	11	45	56	20.00	1	0	1	0.36	75	48
41-45	3	2	5	2.92	26	21	47	27.49	15	24	39	22.81	0	1	1	0.58	45	34
46-50	1	4	5	4.81	8	13	21	20.19	8	21	29	27.88	0	0	0	0	20	26
51-55	0	1	1	1.37	6	8	14	19.18	6	22	28	38.36	0	1	1	1.37	16	13
56-60	0	1	1	2.38	5	7	12	28.57	1	8	9	21.43	0	0	0	0	12	8
61-65	0	0	0	0	2	2	4	21.05	0	8	8	42.11	0	0	0	0	1	6
> 65	0	0	0	0	0	2	2	12.50	0	4	4	25.00	0	0	0	0	6	4
TOTAL	28	28	56	2.39	493	422	915	39.10	96	282	378	16.15	3	10	13	0.56	522	439

(CONTINUED)

SOURCE: 1991-92 STUDENT DATA BASE

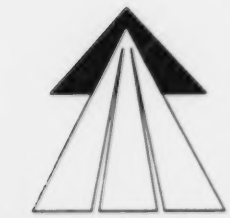
APPENDIX F

FLORIDA COMMUNITY COLLEGE SYSTEM
VOCATIONAL PREPARATORY COURSES
AGE, RACE AND GENDER DISTRIBUTIONS

SYSTEM TOTALS

	WHITE		UNKNOWN				TOTAL
	TOTAL		F	M	TOTAL		
	CNT	%	CNT	CNT	CNT	%	CNT
AGE							
< 16	32	58.18	0	0	0	0	55
16-20	185	57.63	1	0	1	0.31	321
21-25	136	29.69	7	2	9	1.97	458
26-30	150	32.19	1	0	1	0.21	466
31-35	144	42.99	1	1	2	0.60	335
36-40	123	43.93	1	0	1	0.36	280
41-45	79	46.20	0	0	0	0	171
46-50	46	44.23	3	0	3	2.88	104
51-55	29	39.73	0	0	0	0	73
56-60	20	47.62	0	0	0	0	42
61-65	7	36.84	0	0	0	0	19
> 65	10	62.50	0	0	0	0	16
TOTAL	961	41.07	14	3	17	0.73	2,340

SOURCE: 1991-92 STUDENT DATA BASE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